

HEALTH IT, QUALITY REPORTING AND
MEDICAID WELL CHILD BENEFITS: AN
ASSESSMENT OF PROGRESS AND POTENTIAL IN
THE DISTRICT OF COLUMBIA

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EXECUTIVE SUMMARY

It is widely acknowledged that the lack of information across all levels of our health care delivery structure is a critical factor contributing to current deficits in safety, efficiency, and health outcomes. State Medicaid agencies with responsibility for administering publicly subsidized health coverage - including Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefits for children - face distinct challenges in accessing and using accurate information to monitor the provision of benefits and services provided by the health care system. As has happened in other states, in the District of Columbia (the District) a lawsuit brought these issues to the forefront; the District's Medicaid agency efforts to ensure the provision of EPSDT benefits are now overseen by the U.S. District Court in the District of Columbia under the terms of the *Salazar v. District of Columbia Settlement Agreement*. In light of promising developments in the realm of electronic health care information and quality measurement and reporting, the Court requested a report from NASHP to identify and offer recommendations on new and emerging capacity within the District that could enhance oversight of the District's provision of EPSDT benefits.

This report is being shared with the permission of the District Medicaid agency and the U.S. District Court for the District of Columbia. Although it profiles the District of Columbia, the report offers insights and has implications for other states in several areas: evolving HIT/HIE capacity, the emerging quality measurement framework for children's health, and how these tools can promote better quality measurement and reporting for EPSDT services. While detailing the assets and challenges of the District's EPSDT, quality, and HIT/HIE infrastructures, the lessons learned may inform current state and national discussions on promoting and measuring children's health system quality, particularly in the context of state Medicaid programs.

Recent national developments indicate the emergence of a national framework for effective child health quality oversight and improvement. The development of consensus-based child health practice standards, exemplified by the Bright Futures initiative, has established a national reference point for pediatric practices in well child care. Development and refinement of health quality measures, such as those contained in the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS), as well as the measure evaluation and endorsement process at the National Quality Forum, together provide the contours of a national health quality improvement agenda. The Children's Health Insurance Program Reauthorization Act of 2009 has brought resources and attention to children's health quality measurement and improvement in particular. At the same time, recent federal investments through the Health Information Technology for Economic and Clinical Health (HITECH) Act in both statewide infrastructure for health information exchange and in the "meaningful use" of health information technology at the provider level have supported unprecedented activity in HIT and HIE adoption. The convergence of health quality measurement and HIE/HIT initiatives, along with development of new EHR-based quality measure ("eMeasure") specifications and reporting methods, provide new opportunities for states to monitor and improve the quality of services delivered for children through Medicaid and the EPSDT program.

The report finds that the District has an important opportunity to build upon this emerging national framework. The District's Medicaid agency, the Department of Health Care Finance (DHCF), already has in place a comprehensive quality improvement strategy for its managed care organizations (MCOs). HealthCheck, the District's EPSDT benefit, relies on practice guidelines that are based on the Bright Futures curriculum, and uses a web-based Provider Education System to support and train EPSDT providers. An existing collaboration aimed at improving health care for children, the DC Partnership to Improve Children's Healthcare Quality, has already done background work in identifying data elements providers could use to meet the reporting requirements established by *Salazar*. Because these reporting requirements align closely with national standards

for best practices in children’s well-child services, the District’s considerations in this arena provide an excellent case study and lessons learned for other states.

The District has also made large gains in provider electronic health record (EHR) capacity in recent years. A District-wide health information exchange (HIE) is being developed by the DC Regional Health Information Organization; several of the District’s providers have already connected to and are exchanging data through the HIE. The DHCF is building a Medicaid Patient Data Hub that will serve as a repository for Medicaid MCO claims data, some historical data, and current EHR data from providers. Well-defined pathways for reporting data on immunizations and lead screenings also already exist in the District.

Despite these impressive assets, the District, like other states, faces challenges in its efforts to link various threads of development, to formalize and stabilize new methods and operational relationships and to go the last mile to operationalize proposed data collection and use. While states share many common challenges, each state presents its own unique set of assets, strengths, and problems. The District, for instance, is unique in its operation as both a city and a state; the *Salazar* case and other factors have also shaped its EPSDT program in particular ways. That said, as other states consider how best to align emerging HIT/HIE capacity and tools for quality measurement to promote children’s health care quality, review of these recommendations—while unique to the District—can provide valuable insight and a helpful framework for this work.

This report identifies four major objectives, summarized below, that will enable the District to realize a robust EPSDT oversight and quality improvement strategy. Together, these objectives and the recommendations for achieving them describe a system that leverages EHR-based clinical data to report on nationally recognized measures, identifies and gathers additional, EPSDT-specific data to support other reporting and compliance needs, integrates EPSDT quality improvement into its existing Medicaid quality improvement framework, leverages a growing HIT/HIE capacity for EPSDT reporting, and embeds EPSDT needs and goals into overall quality and HIT/HIE planning.

Objective 1: A coherent and integrated methodology for EPSDT Health Quality Measurement and Reporting

Recommendation 1a: Prioritize the adoption of nationally endorsed, evidence-based eMeasures as part of the District's reporting, compliance, and quality methodology as they become available.

Recommendation 1b: Develop a data set that can be reported by providers and/or MCOs and used by the Medicaid agency to most effectively assess and improve the quality of well child health care, as well as meet compliance and reporting requirements.

Recommendation 1c: Align new EPSDT compliance and quality resources with overarching Medicaid agency and District-wide quality improvement efforts, working with both providers and MCOs to support ongoing EPSDT-specific reporting, compliance, and quality improvement.

Objective 2: Sufficient pediatric electronic health record capacity

Recommendation 2a: Achieve a critical mass of adoption and use of pediatric-appropriate EHR systems by providers within the District who serve Medicaid-eligible children.

Objective 3: District-wide HIE capacity and operations that support EPSDT oversight and quality improvement

Recommendation 3a: Incorporate and operationalize priorities for achieving pediatric/Medicaid and EPSDT data sharing capacity as part of the District's Strategic and Operational HIT planning under HITECH

Objective 4: District leadership and infrastructure to support transition to EHR-supported oversight and quality improvement

Recommendation 4a: Identify key interdepartmental and public-private leadership and organizational structures to support new capacity development for HIT-HIE enabled EPSDT reporting, compliance, and quality improvement activities

Recommendation 4b: Develop a comprehensive plan for executing the EPSDT Oversight and Quality Improvement Strategy detailing timelines and key tasks

INTRODUCTION

It is widely acknowledged that the lack of information across all levels of our health care delivery structure is a critical factor contributing to current deficits in safety, efficiency, and health outcomes. Paper-based health records and cumbersome and limited methods of collecting and analyzing data have made it difficult to reliably take stock of and improve the quality of health care services being delivered. State agencies responsible for administering Medicaid’s Early and Periodic Screening, Diagnosis and Treatment (EPSDT) benefit and charged with ensuring and documenting both access to and quality of care for children who receive well child services through the Medicaid program face distinct challenges in accessing and using accurate information for these activities. This report, requested by the U. S. District Court in the District of Columbia, focuses on these challenges in the context of the District of Columbia.

A note on “well child” services

Well child services, as used throughout this report, refers to the set of activities included in a comprehensive pediatric Healthcheck visit:

1. A comprehensive health and developmental history
2. A comprehensive physical exam
3. Health education, including anticipatory guidance
4. Appropriate Immunizations
5. Laboratory tests, including lead screening
6. Additional assessments including dental screen and risk assessment, and sensory screening i.e., vision and hearing)

In the District of Columbia (the District), oversight and quality improvement efforts relating to the EPSDT benefit have been largely focused on and directed by the requirements of the *Salazar v. District of Columbia* Settlement Order.¹ This litigation began in 1993, initiated by parents of Medicaid eligible children who alleged the District had failed to provide their children with well child and other services required under the EPSDT benefit. The lawsuit resulted in a comprehensive Settlement Order that has guided extensive and complex compliance activities in the District since that time.

The District’s Medicaid agency, the Department of Health Care Finance (DHCF), has taken steps to collect data from its providers and health plans to measure and report on provision of the EPSDT benefit as part of mandatory reporting to the Centers for Medicare & Medicaid Services (via the 416 reporting form) and in order to demonstrate compliance with the delivery of the EPSDT benefit per the *Salazar* settlement. These efforts have been fraught with challenges – challenges common in many other state EPSDT programs. However, two major trends are now converging to dramatically influence the ability of the District to collect EPSDT data, both for oversight (i.e., reporting for CMS and *Salazar* compliance) and quality (tracking and improving the quality of well child visits received by children in the District). These trends include 1) an evolution in the science and practice of defining, measuring and improving the efficiency and effectiveness of health care services; and 2) the movement to interoperable digital information systems that enable the storage of information in electronic health record (EHR) systems as well as sharing that information across organizational and system boundaries via health information exchange (HIE) networks.

Since the Settlement Order was issued in 1999, significant advancements have been made in the field of health care quality measurement, including child health quality measurement. Independent non-profit

consensus-building organizations such as the National Committee for Quality Assurance and the National Quality Forum provide leadership in developing and endorsing evidence-based measures – detailed specifications for calculating relative levels of health care provision that constitute quality health care. These measures are subject to nationwide discussion and rigorous adoption and endorsement processes. Major nationwide initiatives –including federal projects and legislation – are shifting the focus of quality measurement from local or payer-specific approaches to reliable and well-validated national methodologies for standardizing the collection of information needed to improve children’s health care across payers and systems. The Children’s Health Insurance Plan Reauthorization Act of 2009 (CHIPRA),² the subsequent development of a set of child health care quality measures (the CHIPRA core measures set), and related children’s health quality initiatives support state agencies and provide tools to adopt these new approaches.

On a converging path, funding through the HITECH Act for statewide HIE development³, as well as Medicaid and Medicare incentive payments for providers’ adoption and meaningful use of EHR⁴, are poised to transform states’ capacity for how health data is created, shared and used. Federal standards and certification requirements are in place for EHRs; promising work is underway to develop additional technical standards specific to the pediatric EHR that will enhance the capacity of digital health information systems to create, store and share robust and consistent clinical data. At this busy intersection of possibilities stands the District, which, like other states and their Medicaid agencies, is charged with identifying the best route forward in structuring ongoing efforts to manage oversight and quality improvement within the Medicaid program. DHCF and other state agencies are at an important juncture in the ability to measure and improve the quality of well child services within state Medicaid and EPSDT programs. For the District, taking into account the extra level of scrutiny and accountability imposed by *Salazar*, the considerations and challenges on this path are complex. However, the opportunities for advancing effective, state of the art quality improvement strategies are equally compelling.

This report was developed in response to a request from the U.S. District Court in the District of Columbia, to detail the implications for the District of how its EPSDT oversight and quality management obligations regarding well child services (see Box 1) can be served by an emerging nationwide framework for quality measurement and improvement and interoperable health information systems. As a starting point, the report provides a context for understanding the implications of national and state quality measurement strategies and resources. The report then describes key findings and observations on specific assets and capacity within the District related to HIT and HIE infrastructure and quality improvement. Finally, the report offers recommendations and action steps for how the District’s EPSDT oversight and quality efforts can be strengthened, addressing four broad objectives:

1. A coherent and integrated strategy for EPSDT well child oversight and health quality improvement that includes nationally-endorsed eMeasures, a compliance data set modeled on work already done for the District’s Standardized Medical Record Form, and alignment of EPSDT reporting and compliance activities with the District’s overarching quality strategy
2. Sufficient pediatric EHR capacity
3. District HIE capacity and operations that support EPSDT oversight and quality improvement
4. District leadership and infrastructure to support transition to EHR-supported quality oversight and improvement

Although this report addresses the specific requirements and conditions of the District of Columbia and well child measurement efforts for its EPSDT benefit, it also provides information, observations, and recommenda-

tions that have a broader applicability. As state agencies work to better manage and report on their well child activities within Medicaid, and as they concurrently develop these quality strategies within an emerging HIE infrastructure, the lessons from the District's experience are illustrative. This analysis may therefore provide other states with valuable lessons learned and examples on how to move forward to improve the quality of well child services delivered through a state EPSDT program.

A FRAMEWORK FOR EFFECTIVE QUALITY OVERSIGHT AND IMPROVEMENT: NATIONAL AND
STATE CHILDREN’S MEASUREMENT AND QUALITY STRATEGIES

A significant evolution has occurred within the last decade related to what constitutes quality health care, how to measure it, and how to improve it. The groundbreaking work of the IOM in *Crossing the Quality Chasm*⁵ established a new paradigm for approaching health care quality in the US health care system and led to the development of widely accepted health care quality improvement methodologies; these approaches are now found in health care systems at all levels. Moreover, quality initiatives and lessons learned from the field now point to quality improvement as an ongoing, integrated activity woven into management, clinical, and reporting processes which together can ensure that the best standards of care are being met. The recent report released by Secretary Sebelius, *Children’s Health Insurance Program Reauthorization Act Annual Report on the Quality of Care for Children in Medicaid and CHIP*,⁶ underscores the importance of quality initiatives and highlights the extent to which a national quality measurement and improvement strategy has become a part of the broad federal agenda for improving the US health care system.

**National and State Children’s Measurement
and Quality Strategies**

Evidence-Based Child Health Clinical Practice Guidelines

Standardized Quality Measurement

Health Information Technology and Exchange

Medicaid, CHIP and Related State Quality Improvement Strategies

Figure 1 illustrates major components of a quality improvement strategy.

Figure 1: Major Components of a Quality Improvement Strategy



Recent national and federally-driven activities have led to new resources and tools for states and other health care systems in their efforts to implement these integrated quality strategies, including reimbursement methodologies such as pay-for-performance and value-based contracting. Many of these new resources and tools target children's health quality improvement in particular. The sections that follow provide a brief summary of major initiatives and resources available to state agencies and health care systems to improve well child care, use standardized measures to promote quality improvement, and build the technical infrastructure necessary to support these processes.

EVIDENCE-BASED CHILD HEALTH CLINICAL PRACTICE GUIDELINES

Bright Futures is a national initiative targeting the improvement of care received by children at all phases of development. The program was initiated through the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB) and is now spearheaded by the American Academy of Pediatrics in collaboration with other state and federally-funded partners through a consensus-based and frequently updated process. Bright Futures consists of multiple resources, training tools, guides and standards that together serve as a national reference for consensus-based pediatric practices in well child care; it also includes resources and recommendations designed to inform and engage families in well child care. Section 2713 of the Affordable Care Act now requires group health plans and health insurance issuers to provide coverage for Bright Futures recommended preventive care, and prohibits plans from imposing cost-sharing requirements on these services.

STANDARDIZED QUALITY MEASUREMENT

The National Committee for Quality Assurance: The NCQA is a key national quality organization that develops health quality measures through an evidence-driven, consensus-based model. With a wide group of experts and stakeholders, the NCQA identifies quality improvement priority areas, convenes technical advisory groups on specific issues, develops and tests draft measures, provides opportunity for comment from the public, and concludes with a formal adoption process. NCQA developed and continues to update the Healthcare Effectiveness Data and Information Set (HEDIS), a set of 75 measures used for quality improvement by more than 90 percent of the health care plans in the United States.⁷ NCQA uses HEDIS and other standards as a part of its accreditation process for health care plans. The District is one of 11 states that require NCQA Accreditation for Medicaid managed care plans; all Medicaid MCOs in the District are required to report HEDIS measures. NCQA measures, having been developed in the context of assisting payers and patients in comparing the quality of plans, are typically measured at the plan level, although specifications at the provider level are available.

The National Quality Forum: The NQF is another important organization on the health quality measurement landscape. While NCQA focuses on health industry measurement strategies, accreditation, and using measures for evaluating relative performance and quality improvement, NQF focuses more specifically on the endorsement of measures that align with the current clinical evidence and forging a national agenda on quality measurement priorities. NQF's measure evaluation criteria (see Appendix A) include four main points: the measure must be important, it must produce consistent and reliable results, it must be useful for its intended audience, and it must be feasible to implement.⁸ The NQF has endorsed 85 health measures related to children, but also recognizes that children's health quality measures have received inadequate attention. In order to identify and foster additional child health quality measures, the organization initiated the 2010 Child Health Quality Measures project. On February 1, 2011, the NQF released for comment an additional 41 measures for children, including additional measures for well child and preventive services.

The Development of eMeasures: NCQA HEDIS measures consist of detailed specifications for the data to be collected, and how data should be expressed and calculated to derive measurement values. To report HEDIS measures as part of NCQA accreditation or otherwise, managed care organizations use sources of data based on what is available from their providers. Data types include administrative data (e.g. largely claims data submitted for payment), medical record review using sampling techniques to gather information from the actual health record, and hybrid data, which includes a blend of administrative data and other data sources such as medical record reviews. Most of the quality measures submitted to state Medicaid programs rely on administrative claims data. Other measure sets, such as the Child and Adolescent Health Measurement Initiative, derive their data from structured surveys.

Both NCQA and NQF are closely involved in work to migrate or re-tool NCQA and NQF measure sets to an “eMeasures” format. eMeasures will allow existing and future national health quality measures to be supported by data extracted directly from a clinically-driven electronic health record. This rich data source, developed as a part of the patient visit, has the potential to transform the science and practice of health quality measurement by creating real-time, consistent data that more accurately describes and supports clinical best practices. eMeasures are currently being developed; it is expected that by the end of 2011, all health measures submissions to NQF will be required to have eMeasures specifications.⁹

Federal Initiatives to Advance Child Health Quality Measurement: In many ways, the Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA) ushered in a new era in child health quality measurement. The legislation contains numerous components that support quality measurement initiatives, including the development of a national core measure set for children (see Appendix C), the adoption of best practices in child health quality measurement, demonstration grants for states focusing on children’s health care quality, measurement, and HIT (further discussed below) and the establishment of the pediatric child quality measures program. CHIPRA also supports a pediatric EHR initiative through the Agency for Healthcare Research and Quality (AHRQ). This project will provide a set of national standards to support the needs of children and pediatric practices in EHR development.

HEALTH INFORMATION TECHNOLOGY AND EXCHANGE

Medicaid Incentive Program for Meaningful Use of HIT: The HITECH Act provides incentive payments under Medicare or Medicaid for eligible providers who have adopted certified EHR systems and who meet statutory requirements for “meaningful use” of an EHR system. To receive incentive payments for adopting EHR systems, eligible providers will need to demonstrate an increasingly complex set activities over three stages of meaningful use implementation. In addition, eligible providers will need to be able to report on selected measures from a clinical quality measures menu. Stage one, for example, requires the eligible provider to be able to submit electronic data to immunization registries. In addition, many of the clinical quality measures are NCQA measures, and two refer specifically to well child care: a measure of weight assessment and counseling for children and adolescents, and a childhood immunization status measure. Appendix B contains a summary table of stage one meaningful use requirements.

It is the responsibility of state Medicaid programs to implement an Incentive Program. States are required to submit a State Medicaid HIT Plan (SMHP) for approval in order to participate in the Medicaid EHR Incentive Program. The SMHP details how the Medicaid agency intends to administer the program, including certifying that providers have met criteria to receive funds. With an approved SMHP plan, State Medicaid programs are able to receive enhanced federal matching funds for EHR-meaningful use efforts. CMS has also made available a cost allocation methodology, encouraging Medicaid programs to consider collaborative investments as part of their State HIE planning.

State Health Information Exchange Cooperative Agreement Program (State HIE Program). In addition to the Medicaid Incentives program, which focuses on implementation and operation of EHRs at the provider level, the State HIE Program, administered by the Office of the National Coordinator for Health IT (ONC) and also a component of the HITECH Act, creates opportunities for broad interoperable exchange of information. All states, or their state-designated non-governmental entities, received HITECH funding for developing strategic and operational plans to achieve statewide health information exchange and support the meaningful use of HIT. As states submit and receive ONC approval for their plans, they draw down implementation funds. Based on reporting requirements established in federal rule, states must demonstrate measurable progress in achieving meaningful use. States vary in their plans for achieving HIE; many are implementing state level health information organizations (formerly referred to as regional health information organizations or RHIOs) to provide coordination and technical HIE services. All states are required under the State HIE Program to designate an HIT Coordinator, a state government employee to play a key role ensuring coordination of HIE policy and implementation within and outside state government, including coordination and alignment with Medicaid HIT planning. As discussed, some measures of meaningful use pertain to child health, e.g. the ability to exchange information with an immunization registry. Generally, however, the State HIE program does not have a specific focus pertinent to children.

Regional Extension Center Program (REC) The third major component of the HITECH Act involves grants to organizations for support, technical assistance, and education on EHR adoption and implementation to eligible providers. The RECs are designed to be important local resources, close to the provider community, which can provide direct technical assistance in understanding, selecting, and incorporating the EHR into practice culture and workflow.

MEDICAID, CHIP AND RELATED STATE QUALITY IMPROVEMENT STRATEGIES

CHIPRA Demonstration Grants and State Strategies All states are involved in the development of health information exchange and capacity building for EHRs as a result of the HITECH Act. Many states also have well-defined health measurement initiatives. Minnesota, for example, has created a set of measures and a quality reporting system that all payers must use to track and measure the quality of care.¹⁰ Other states, such as North Carolina, have mature and highly interactive quality improvement systems focused on the Medicaid population.¹¹ Few states, however, have begun to focus their quality measurement and improvement systems on the emerging data available through the EHR. Information from the CHIPRA demonstration grants, structured to foster state quality improvement strategies at the intersection of children's health measurement, HIT, and clinical care, will provide an excellent resource for the District and other state agencies in this area. Pennsylvania, for example, will test and report on recommended pediatric quality measures and promote the use of HIT in health care delivery to maximize the early identification of children with developmental delay, behavioral health issues, and complex medical conditions. Massachusetts and Vermont plan to expand their information technology systems to improve the exchange of child health data and expedite the provision of services to children in foster care. Appendix D contains a summary of all CHIPRA demonstration projects. In addition to the grants themselves, which are funded by CMS, the Agency for Healthcare Research and Quality (AHRQ), working in collaboration with CMS, is supporting a major evaluation of the demonstration projects that will generate "replication guides" and other documents to assist states in using quality measures to improve child health services, including well child services.

Medicaid and CHIP Quality Strategy: Medicaid managed care programs are required to have a comprehensive quality strategy.¹² This strategy must include how the state will assess the quality of care delivered through the MCO contract, and how the state, based on this assessment, will improve the quality of care.¹³ CHIPRA recently expanded this requirement to state/District CHIP programs.¹⁴

DISTRICT ASSETS AND RESOURCES RELATIVE TO WELL CHILD OVERSIGHT AND QUALITY IMPROVEMENT

In review of the implications for the District of emerging IT enabled child quality measurement strategies, NASHP assessed the assets and potential resources that can be leveraged across the District to meet goals for effective quality oversight under *Salazar*. The findings from this review suggest a system that is positioned to leverage emerging national measures and HIT/HIE initiatives for oversight and quality improvement activities targeting well child services. While significant and complex work is involved in transitioning to an EHR-enabled quality measurement system, the District can build on three key assets: its existing quality improvement infrastructure, an engaged and active pediatric provider community, and key elements of HIT and HIE capacity development.

THE DISTRICT QUALITY IMPROVEMENT INFRASTRUCTURE

DHCF Quality Improvement Strategy The great majority of Medicaid-enrolled children in the District receive their care through three managed care organizations.¹⁵ As a part of its federally-required compliance activities associated with Medicaid managed care, DHCF oversees a well-developed quality improvement strategy for the District. The District's quality improvement strategy uses national measures (currently calculated largely with claims data) to track Pay for Performance (P4P) goals.¹⁶ DHCF also employs a learning collaborative model for quality improvement, setting benchmark goals for District-specific health care priorities and working closely with MCO medical directors to promote quality improvement in these areas.¹⁷ These learning collaboratives leverage MCO expertise to develop innovative quality improvement strategies that impact care at the provider level. Changes are measured over time to see which approaches are working to improve outcomes.

District MCOs must be accredited through the NCQA, a process that requires MCOs to demonstrate performance against a set of national operational standards as well as quality reporting on measures contained in the HEDIS. These measures play a role in Pay for Performance quality activities, as mentioned, and have also been used by DHCF to develop a consumer report card comparing measures across Medicaid managed care organizations. EPSDT is woven throughout the various levels of the District's quality strategy, although specific pieces of EPSDT have not as of yet been a focus of Pay for Performance or learning collaborative activities. EPSDT requirements are included in the District's Continuous Quality Improvement Plan for the Oversight of Managed Care Organizations¹⁸, and MCO contract language (as required by *Salazar*) includes specific quality and reporting requirements for the EPSDT benefit.

Key District Assets and Resources
District Quality Infrastructure DHCF Quality Improvement Strategy Bright Futures and the HealthCheck Provider Portal
District Plan and Provider Expertise and Engagement Partnership to Improve Children's Healthcare Quality The Standard Medical Record Form
HIT and HIE Development Baseline District Provider EHR Capacity Medicaid EHR Incentive Program Regional Extension Center DC Strategic and Operational Plans for Health Information Exchange (Interoperability) and Data Analytics DC Regional Health Information Organization Patient Data Hub District Immunization Registry LeadTrax System

In addition, changes that are expected in late spring within the DHCF management and organizational structure should better align children's health services and quality. Expected restructuring will bring the offices responsible for children's health services and quality measurement and outcomes into the same administrative structure, providing additional opportunities for collaborative work in this area.

Bright Futures and the HealthCheck Provider Portal The District's EPSDT benefit, HealthCheck, was developed through collaboration with local providers and is based on a previous version of Bright Futures guidelines. The Healthcheck benefit is updated regularly to reflect standards contained in the latest version of Bright Futures Guidelines, and is also modified to serve the unique needs of DC's Medicaid population. Physicians and others who provide HealthCheck services can use the HealthCheck Provider Education System (<http://www.dchealth-check.net>) to access information, training and other clinical support materials. The HealthCheck provider portal contains training and resources detailing the required components of an EPSDT well child visit and other topics of interest to well child service delivery, including dental screening and childhood obesity issues. HealthCheck providers can satisfy biannual training requirements by logging in to the HealthCheck Provider Portal and using its resources. The Portal also describes the data elements in electronic health records needed for various components of a well child visit. In addition, the Provider Portal contains resources for families, including materials describing Bright Futures standards used in the District and other health education resources.

DISTRICT PLAN AND PROVIDER EXPERTISE AND ENGAGEMENT

Partnership to Improve Children's Healthcare Quality Successful quality improvement initiatives require support and engagement from the provider community that will ultimately bear significant responsibility for implementing them. The District has an active provider community with a clear interest in advancing quality improvement strategies. Since 2005, representatives of the District's provider community have collaborated on pediatric quality improvement with managed care organizations and with DHCF through the DC Partnership for Children's Healthcare Quality (DC PICHQ).¹⁹ Through this partnership, local pediatricians have provided leadership and have worked to leverage Bright Futures and the HealthCheck program to engage children's providers throughout the District to improve quality. The DC PICHQ used a learning collaborative model from 2005 to 2008 for quality improvement efforts and for the development of the Standard Medical Record Form. The group has subsequently facilitated learning collaboratives around immunization, asthma, and developmental screening for pediatric practices within Children's National Medical Center and with other District practices.

The Standard Medical Record Form The DC PICHQ was instrumental in developing the paper-based Standard Medical Record Form (SMRF) used by providers to meet the reporting requirements established by *Salazar* and based on the Bright Futures standards at the time. Pediatric practices in the District began using the SMRFs in 2005, replacing their own medical record forms (which were still on paper) with these standard forms, and sending copies to the District for database entry. When practices began migrating to EHRs, the SMRFs became redundant (along with many other paper-based systems). The SMRFs represent an initial "meeting of the minds" within the District on the data elements necessary to create a full picture of EPSDT activity for oversight and quality improvement. Moreover, interested providers in the District (notably providers in the IQ Network) have done the cross-walking work necessary to incorporate the SMRF data elements into the EHR as a clinical support tool. In this EHR-supported format, the SMRF may have significant value as a starting point for future oversight and quality improvement activities, as will be described further in subsequent sections of this report.

HIT AND HIE DEVELOPMENT

The HIT and HIE landscape of the District has been transformed during the past five years. Multiple initiatives aimed at fostering HIE in the District, a far more rapid adoption of EHRs by providers than observers in the Dis-

trict had anticipated, and the impact of federal initiatives have equipped the District with a strong foundation on which to build its digital infrastructure for health information exchange. The District is in the midst of planning efforts to take advantage of federal opportunities to support HIT capacity and HIE development; the completion and integration of these planning efforts across the multiple initiatives outlined below is critical to achieving HIT and HIE capacity to support enhanced child health quality measurement efforts.

HIT Capacity

Baseline District EHR Capacity Provider EHR capacity in the District has grown rapidly in recent years. Appendix E, excerpted from a draft of the District of Columbia Health Information Exchange Strategic Plan, describes these various efforts. Half of the District's providers are capable of electronically reporting data to the District's immunization registry, up from 30 percent of providers in 2009 and only 1 percent of providers in 2008. The District's Regional Extension Center, eHealthDC, reported in late 2010 that 36 percent of eligible primary care physicians in the District have EHR capabilities. Moreover, both Children's National Medical Center and its affiliated providers, known as the IQ Network, and the District's FQHC network—the two largest providers of services to Medicaid-eligible children—are on a common EHR platform, eClinicalWorks. Between these providers and other community health centers in the District that have adopted eClinicalWorks, approximately half of the District's Medicaid-covered lives are on a common EHR platform. Allscripts, a different platform, is in use at Howard University Hospitals and the medical faculty at George Washington. Providers associated with Washington Hospital Center are using the GE Healthcare Centricity platform. The DC RHIO is built upon the Microsoft Amalga product, in part because it is "EHR agnostic" and can exchange data with the different EHRs being adopted by the District's hospitals, community health centers and other provider practices.

Medicaid EHR Incentive Program The District has not yet submitted its State Medicaid HIT Plan. Once this process has been completed and the plan approved, the District will be able to draw down federal Medicaid dollars to support eligible pediatric providers in EHR adoption and meaningful use of the technology. The District is in the process of identifying a vendor to assist in the development of the SMHP: it is expected that the plan for the District's Medicaid Incentive Program will be completed in August.

Regional Extension Center The DC Primary Care Association (DCPCA) is home to the District's Regional Extension Center, eHealthDC, the organization tasked with assisting eligible providers in the process of adopting and meaningfully using EHRs. One aspect of REC efforts across the country is identifying criteria for EHR system functionality that products/vendors must meet in order to be offered to providers through the state's REC program. eHealthDC is currently working to do this and is positioned to be able to incorporate requirements for pediatric EHR functionalities into the baseline functionality requirements for all EHRs implemented in the District. eHealthDC could also potentially play a role to prioritize working with Medicaid EPSDT providers on EHR adoption and use for EPSDT data reporting.

HIE Capacity

DC Strategic and Operations Plans for Health Information Exchange (Interoperability) and Data Analytics The proliferation of HIE projects in the District initially generated a competitive environment, with some ambiguity of roles and responsibilities within the emerging system. Recently however, clarity appears to be emerging in response to evolving guidance under the HITECH State HIE Program, and efforts by parties within the District to complete a viable strategic plan for how HIE capacity can best be implemented across the District. The District submitted its initial Strategic and Operational Plans to the Office

of the National Coordination in early March; these plans are currently under revision and will be re-submitted in April. The District anticipates approval of the plans in the very near future. As part of the District plan for its HIE approach, the DC RHIO will be contracted to serve as the District's statewide HIE organization. The Patient Data Hub will receive Medicaid enrollee data from the DC HIE to use for analysis, reporting, and other quality improvement and compliance activities. The IQ Network will continue to focus on the development of its broad, child-focused interoperable network, and will eventually link to the DC HIE. Together, these and other interoperable components of the HIE system will allow DHCF to have access to Medicaid and EPSDT-specific EHR data. From there, specific reporting and analytic queries can be designed and used by DHCF for oversight and quality improvement. The District's HIT Coordinator, a DHCF position, is a key state government resource required under the State HIE Program and responsible for coordinating the planning and implementation of the District's Strategic and Operations plans, HIT adoption and state government HIT and HIE strategies. Further information, including the proposed DC HIE schematic, can be found in Appendix E.

DC Regional Health Information Organization In 2007, the DCPCA was awarded a grant by the District Department of Health to construct the DC Regional Health Information Organization (DC RHIO). The District has built the DC RHIO into its Strategic and Operations Plans as the organization that will become the DC HIE under the State HIE Cooperative Agreement program. The DC RHIO uses Microsoft's Amalga platform to share information and support health care delivery across a number of provider/partner organizations. At present, the DC RHIO has connected three hospitals, with one more hospital in the process of being connected, and six safety net health centers, with two more health centers in the process of being connected.²⁰

Using a data warehouse model, the DC RHIO will ultimately connect with all able providers across the District to extract, store, and exchange clinical health care data. In its Strategic Plan, the District specifically mentions the need to connect current pediatric EHR capacity with DC HIE services in order to support EPSDT reporting needs.²¹

Patient Data Hub In 2007, the District was awarded a Medicaid Transformation Grant to begin building a Patient Data Hub (PDH) for the Medicaid program. The PDH will link to the DC RHIO and have access to health information associated with Medicaid enrollees in the District. The PDH is intended to merge MCO claims data, some historical data (including information gleaned from compiled SMRF data), and current EHR data from providers. All health information in the District will flow through the DC RHIO, while the Patient Data Hub will serve as a repository and analytical tool for Medicaid patient data only.

District Immunization Registry The DC Department of Health houses a registry with data on immunizations for children and adults in the city. The registry can be used to track immunization compliance and to provide data and reports on immunization rates in the District. Physicians accessing a patient's immunization record through the registry currently see both an immunization history for the patient and notifications for vaccinations that are overdue or due. Immunization data is currently being transmitted to the DC RHIO system from provider EHRs.

LeadTrax System The District requires that laboratories report to the DC Department of the Environment cases of children who test positive for lead exposure. To resolve inefficiencies associated with paper-based reporting, a website was developed in 2004 for reporting by laboratories, as well as an intranet system for Department of Health personnel. The website, known as LeadTrax, allows lab specialists to upload patient information directly to a patient data system tracking children who test positive for lead exposure. However, this same data is not presently accessible to providers. Integrating data exchange between LeadTrax and the DC HIE is part of the District's Strategic Plan.

KEY FINDINGS AND RECOMMENDATIONS FOR DISTRICT EPSDT QUALITY OVERSIGHT AND IMPROVEMENT

The District is poised to be a leader in the use of national measures to support oversight and quality improvement for well child services in its EPSDT program. Through its emerging EHR and HIT infrastructure, existing quality initiatives, and highly motivated stakeholders, the District has the potential to move forward in incremental and specific steps to harness a growing digital infrastructure to promote quality care for children. National tools and initiatives can support this work in meaningful and very timely ways.

That said, the recommendations delineated in this report describe a very complex, multi-level and multi-agency endeavor. The work will require motivated leadership, a highly coordinated team across both public and private organizations, identified resources to complete tasks, and a realistic project management-oriented focus. Meanwhile, the context within the District continues to change: leadership is in transition, critical pieces of information need to be established, and resources within DHCF may or may not be adequate to fully support the work that must be done in order to meet these goals. With these caveats in mind, the recommendations that follow are structured to provide guidance in the realization of an overarching goal: the development of a robust EPSDT oversight and quality improvement strategy in the District that

- Builds on nationally endorsed well child measurement and reporting strategies
- Leverages current and emerging District-wide system capacities to use EHR-extracted data, and
- Enables the District (and the Court) to consistently and effectively manage its oversight and quality improvement responsibilities for well child services received by the District's Medicaid-enrolled children.

The goal involves four major objectives for this future state of EPSDT oversight and quality improvement for the District.

1. A coherent and integrated measurement strategy for EPSDT well child oversight and health quality measurement:
 - a. The adoption and piloting of nationally endorsed eMeasures to support EPSDT reporting, compliance and quality improvement;
 - b. The development of a compliance data set, modeled on work already done through the development of the District's Standardized Medical Record Form, to augment core national eMeasures;
 - c. The alignment of EPSDT reporting and compliance activities with the District's overarching quality strategy;
2. Sufficient pediatric EHR capacity
3. District HIE capacity and operations that support EPSDT oversight and quality improvement
4. District leadership and infrastructure to support transition to EHR-supported quality oversight and improvement

This section of the report will outline recommendations in support of each of these key objectives. Individual sections that follow will discuss the considerations and challenges involved in meeting these key objectives, and will analyze how these objectives can directly support the District's EPSDT compliance and quality efforts. Associated action steps are further outlined in the Key Tasks and Timeframes document contained in Appendix F.

OBJECTIVE 1: A COHERENT AND INTEGRATED MEASUREMENT STRATEGY FOR EPSDT WELL-CHILD OVERSIGHT AND QUALITY IMPROVEMENT

Objective 1: Key Recommendations

- 1a. Prioritize the adoption of nationally endorsed, evidence-based eMeasures as part of the District's reporting, compliance, and quality methodology as they become available.
- 1b. Develop a data set that can be reported by providers and/or MCOs and used by the DHCF to most effectively assess and improve the quality of well child health care, as well as meet compliance and reporting requirements.
- 1c. Align new EPSDT compliance and quality resources with overarching DHCF and District quality improvement efforts, working with both providers and MCOs to support ongoing EPSDT-specific reporting, compliance, and quality improvement.

Key informants to this report regularly noted that little of the reporting activity in the District regarding EPSDT resulted in actionable information for health plans and providers as to where problems lie in well child service delivery and how to improve them. While recognizing that EPSDT reporting and compliance is critical, the data currently gathered from claims appears to be of limited value for *Salazar* compliance purposes.²² Data previously gathered through the SMRF was also flawed²³ and created a significant burden to providers in its creation and reporting. Throughout, both available data and measures lacked a connection to a quality strategy that could lead to actionable benchmarks and goals for improved well child care. This section details recommendations in support of an integrated strategy that includes the adoption of national measures, the development of a set of EHR-created data tied to meaningful well child quality improvement activity, and the alignment of this activity with the District's quality improvement strategy.

Recommendation 1a: Prioritize the adoption of nationally endorsed, evidence-based eMeasures as a part of the District's reporting, compliance and quality methodology as they become available.

Health quality measures that have been nationally developed and endorsed through consensus-based processes, such as those at NCQA and NQF, are an important source of standardized, evidence-based measurement tools for quality improvement. Moreover, recent and accelerating work to re-tool these national measures as EHR-driven eMeasures has major implications for the District and other health care stakeholders. eMeasures can significantly enhance the quality of data for reporting; they also hold promise for moving the District away from long-standing challenges in using claims data. Because some of these measures are also woven into Meaningful Use requirements within the Medicaid Incentives program as well as used for NCQA accreditation, these measures represent a significant step forward toward an integrated compliance and quality strategy for the District's EPSDT benefit. Although the number of measures specific to well child services is still limited, certain measures and potential eMeasures (detailed further in this report) provide an option for satisfying many EPSDT reporting requirements. This foundation can then be enhanced with District-specific EHR data to provide a complete and richly detailed data set for both compliance and quality improvement, as will be discussed in subsequent recommendations.

Nationally endorsed measures are an increasingly important tool for children's health quality measurement and improvement. Nationally endorsed well-child measures, such as those developed through the NCQA, endorsed through the NQF process, and selected as part of the CHIPRA core measure set²⁴, represent consensus in children's health care as to what is important, what should be measured, and how it can be measured in a

standardized way. The process for both development and endorsement of these measures is rigorous; measures are chosen for their importance and their ability to positively impact the quality of health care received. Nationally endorsed measures offer clear priorities and standards for the health care system as a whole. The passage of CHIPRA and the development of an initial set of core measures for children's health quality signals an important moment in the use of standardized measures for children in particular. Children's Health Insurance Programs across the country will begin reporting on the same measures, with Medicaid adding these measures as a voluntary reporting mechanism.

Data gathered in support of national measures can be leveraged for oversight and quality improvement purposes. Moving away from individualized or Medicaid-specific measures, this work at the national level provides a menu of measures that can be used across states and across payers to satisfy a number of reporting requirements including the CMS 416, NCQA accreditation, and meaningful use.²⁵ Standardization of measures supports an integrated approach to health care quality, and reduces the burden on health care plans and providers in oversight and quality improvement efforts. Moreover, the District already uses national standards as an integral part of its overarching Medicaid quality improvement strategy. The District requires NCQA accreditation for all Medicaid managed care organizations, and collects HEDIS measures from these organizations. Results are used for public reporting²⁶ and also form the measurement base for the District's Pay for Performance initiative within its Medicaid Managed Care Quality Strategy. Nationally endorsed measures are therefore already a critical component of the District's health quality strategy for children's Medicaid and woven into its broader health care strategy, a trend reflected nationally²⁷.

Appendix G, the Well Child Quality Measures Comparative Matrix, describes the requirements of and relationship between HealthCheck well child services, CMS reporting requirements, national measures pertinent to well child services including CHIPRA measures, and Meaningful Use. Many of these data needs overlap, and where they do, the use of national measures can serve multiple purposes. Certain measures included in the matrix may be particularly suited to initial District efforts to support EPSDT oversight and quality improvement; these measures are highlighted in Box 2.

Box 2: Initial Measures for EPSDT Oversight and Quality Improvements

Well-child visits in the first 15 months of life
 Well-child visits in the third, fourth, fifth, and sixth years of life
 Adolescent well-care visits
 Childhood immunization status (combination #10) (NQF 0038) HP
 Immunization for Adolescents
 Lead Screening in Children

As national measures transition to EHR-supported eMeasures, use of these measures will minimize reliance on claims data and enhance oversight and quality improvement. Current measures, including those used by the District to monitor the quality of its MCOs and to report on CMS-416 information, are largely claims-based. Information derived from claims submissions flowing from providers to the MCO are compiled and analyzed to provide a retrospective view of utilization. Medicaid agencies and other payers have used claims data as one of the few solid resources to support a variety of quality improvement activities. While claims data are an important data source, this data has notable drawbacks as a quality measurement tool. Data is limited to the minimum information required to support the claim and is not gathered to support quality or best clinical practice. Claims do not describe what actually happens in the well child visit: a well child visit supported by claims data may or

may not have involved the five elements required under EPSDT. Claims are also process-driven: they do not capture actual patient outcomes, but can only indicate when processes (i.e., billable events) occur. Moreover, claims cannot be analyzed in real time: Medicaid providers have up to one year to submit claims, making turnaround on this data for oversight and quality improvement even longer.

The District's timing in looking at the implications of emerging measures and EHR capacity is fortuitous: ongoing eMeasures retooling will, going forward, support the migration of NCQA and NQF-endorsed national measures to the eMeasures format using EHR-created, clinically-driven data. As a part of this important initiative, all new measures submitted to NQF for endorsement will need to contain eMeasures specifications. Going forward, each new measure endorsed on a national basis will therefore also have standardized data specifications to support data extraction for the eMeasure within an EHR.²⁸ eMeasures on well child care, moreover, will be supported by data elements that align to evidence-based well child services, providing a potentially much richer picture of what actually happens within the well child visit. This data will be a significant new resource on the health care measures landscape.

eMeasures can serve as the foundation for reporting requirements for the CMS-416. As an example, Table 1 illustrates the crosswalk between the CMS 416 reporting requirements, the HealthCheck periodicity requirements, and corresponding national measures on well child service delivery. The same pieces of structured EHR data – here, regarding lead screens – can be extracted from EHRs, aggregated at the DC HIE and Patient Data Hub and used for multiple reporting and quality purposes.

Table 1: Lead Screens: CMS 416, HealthCheck, and NCQA Measure			
	CMS-416 requirements	HealthCheck requirements	NCQA measure
Lead Screen	Total number of screening blood lead tests	All Medicaid-eligible children should be screened for elevated blood lead levels as part of their well child visits at 9 or 12 and 24 months of age.	Lead screening in children: % children two years of age who had one or more capillary or venous lead blood tests for lead poisoning by their 2nd birthday

Nationally endorsed measure sets currently have relatively few measures that are specifically developed for children, and fewer still for the particular components of well child services within EPSDT. However, an initial set of well child measures – highlighted in Box 2 and described more fully in the Matrix found in Appendix G – provides a foundation upon which the District can build: data gathered in support of national eMeasures could also be used as a proxy for reporting in the CMS-416; national measures for lead screening and immunizations can be used to accurately report on these issues to the Court.

Piloting of eMeasures will facilitate the process. The District has significant infrastructure work to complete prior to implementation of eMeasures as described in this section. This includes building operational linkages and processes for sharing and extracting data via provider EHR reporting, the DC HIE, and Patient Data Hub. Once technical capacity is established, DHCF may want to initiate the implementation of eMeasures through a piloting process that will allow the District to test its data extraction, reporting, and analytics capacity over time prior to roll out of a full menu of eMeasures for oversight and quality improvement.

Recommendation 1b: Develop a data set that can be reported by providers and/or MCOs and used by DHCF to most effectively assess the quality of well child health care, as well as meet reporting requirements as part of a comprehensive quality improvement effort.

The challenge of accessing adequate data for compliance reporting has been a theme running through the *Salazar* lawsuit almost since its inception. Recent litigation focusing on auditing of claims data extends this challenge to the present day.²⁹ The District relies on claims data to track and report on the participation ratios of children eligible for EPSDT services in the District; claims data are not tied to specific well child screening components and so, while they are explicitly permitted as proxy data by CMS,³⁰ claims data have proven inadequate in providing a picture of the full range of screening activities required within the HealthCheck program and needed to be tracked and reported by *Salazar*. As a result, full compliance with *Salazar* remains elusive. Using emerging technology and infrastructure to identify meaningful data that can address oversight and quality improvement in an integrated way has the potential to move multiple EPSDT goals forward.

The District requires information beyond the current NCQA well child measures for its compliance needs

The ability to track and measure what actually happens within the well child visit has been a central and contentious issue for the District of Columbia in its compliance efforts. As noted in the plaintiff's recent Motion to Enforce Independent Verification of the EPSDT Data Requirement of Paragraph 46 of the Settlement Order, audits of claims data in previous years "...showed that the reports of the MCOs about how many screens their providers had performed could not be verified based on medical records and that the data were highly inflated." The District's response noted that a significant problem with the data is the long-standing issue that medical records are not created to "generate data for a lawsuit" but instead to assist in patient care.³¹

Box 3 illustrates how the HealthCheck standard for the well child visit compares to a current NCQA well child visit measure. The example below lists the components of the well child visit that are looked for in the medical record review for this NCQA measure, and includes health and developmental history, physical exam, and anticipatory guidance. In comparison, HealthCheck – and *Salazar* oversight and reporting requirements – requires assurance that age-appropriate immunizations and assessments have also been delivered as a part of the well child visit.

Box 3: Comparison of HealthCheck Well-Child and NCQA Measure	
NCQA Well Child Visit	HealthCheck standards for a well-child visit
Health and developmental history including an assessment of both physical and mental health Comprehensive medical exam Health education, including anticipatory guidance	Comprehensive health and developmental history Comprehensive physical exam Health education, including anticipatory guidance Appropriate Immunizations Laboratory tests, including lead screening Additional assessments including a dental screen and risk assessment, and sensory screening i.e., vision and hearing)

In adopting this nationally endorsed measure, some additional data may be needed to fully document provision of services according to HealthCheck standards. Other national measures and sources of data can be combined to provide a fuller picture of HealthCheck well-child visit compliance. These include:

- HEDIS/MU Immunization measure and/or data obtained from the Immunization Registry
- HEDIS Lead screening measure and/or data obtained from LeadTrax

Possible additional data needs and measures (e.g. dental and vision screening) are noted in the Well Child Quality Measures Comparative Matrix. Specific data needs will ultimately depend on how well child measures are re-tooled for eMeasure functions.

This side-by-side comparison illustrates the importance of being able to retrieve, aggregate and analyze EHR and other sources of structured data that, combined, support compliance at the required level of detail. It also demonstrates the importance of HIE and data analytic capacity that is needed to, in this illustration, aggregate and analyze dates of services, the age of the child and other relevant information against the periodicity schedule for immunizations and screenings.

The Standard Medical Record Form provides a solid foundation for an EPSDT oversight and quality data set. The District, along with an engaged group of providers and other stakeholders, has worked to enhance and improve data available to substantiate well child services in the District, notably through the creation of the Standard Medical Record Form (SMRF). This paper form data set was ultimately not successful for compliance purposes for the District for a number of reasons, including the burden posed by paper-based reporting as pediatric practices moved increasingly to EHRs. However, the SMRF represents an excellent foundation and consensus document for the District in identifying the range of data needed to show that full, HealthCheck-aligned well child visits have occurred. While the SMRF and its data elements may need to be revisited and updated, the document provides a starting point and framework for these discussions.

Growing EHR capacity now provides the District with a unique opportunity to cross-walk the necessary data elements of the SMRF to the pediatric EHR in a way that supports data collection and the clinical work flow. The SMRF, or what may emerge as an EHR-supported EPSDT oversight and quality improvement data set, can move from a paper compliance reporting form to an automated clinical practice tool that supports Bright Futures and the extraction of data for EPSDT oversight and quality improvement. Work has already been done to align SMRF data elements with EHR record templates and with clinical workflow in the EHR-supported pediatric practice notably using eClinicalWorks within the IQ Network.

Based on the number of providers utilizing eClinicalWorks the District has a head start in this process of cross-walking HealthCheck reporting to a prevalent EHR format. However, considerable work and challenges remain. Significant resources would need to be directed to this process to review SMRF elements and other data resources, describe the data needed, complete the cross-walking process, and identify the technical specifications of extracting and rolling this data into usable quality measurements for the District. Additional work would also be needed to formalize and spread this capacity to other providers and EHR platforms in the District.

The data set can be used for reporting, compliance, and quality. With an EHR-embedded data set that aligns with and clinically supports the HealthCheck curriculum and periodicity schedule, DHCF can access and extract a range of information on the well child visit. As discussed, this data could be used to supplement data collected on national measures to provide a full picture of well child visits for CMS 416 reporting and compliance. The data could also be used to provide a comprehensive view of screenings and other components of the well child visit, providing enormous opportunity to DHCF, providers, and plans for quality improvement where specific issues are identified. Critically, this data offers an opportunity to augment visit counts with more detailed information about the content of care, moving the District toward an integrated quality strategy that uses data to improve the quality of well child services received by children in the HealthCheck program. This EHR-enabled strategy could then provide the foundation for a review and revision of current monitoring standards in *Salazar*,

which rely primarily on claims data and similar reporting methods. These themes will be more fully discussed in the next section.

In this emerging EHR-enabled oversight and quality framework for the District, accurately reporting on well child services for the CMS 416 form may ultimately be accomplished using EHR-created data, identified via the development of the EHR-compatible EPSDT compliance and quality data set. Data aggregated at the DC RHIO from a variety of sources can be available to the Patient Data Hub to support both national measures and HealthCheck-specific requirements. Providers and MCOs will have a streamlined way of accurately reporting on national well child measures, required by NCQA accreditation, meaningful use, and the CHIPRA core measure set, and can then augment these measures in a standardized format to satisfy the specific needs of HealthCheck reporting. This data collection and reporting function, aligned with other oversight and quality efforts, can be a seamless clinical function, no longer an EPSDT-specific, reporting burden.

The District can leverage existing capacity and expertise to develop and pilot an EHR-compatible data set. Development of an EHR-supported data set will require careful analysis and planning. Previous collaborative work within the District has proven successful, as evidenced by the work of the PICHQ, the HealthCheck Portal, and development of the SMRF. These resources can be tapped to develop the EPSDT compliance and quality data set, using the SMRF as a starting point and the appended Matrix as an additional guide in identifying gaps and overlap. In addition, work already done in the District within the IQ Network to cross-walk the SMRF data elements to the eClinicalWorks platform can be leveraged: with the current penetration of eClinicalWorks in the District as a start, over half the pediatric providers in the District could, with some development work, have access to this oversight and quality improvement data set in an EHR format.

Given the complexity of the tasks involved, and the fact that the District will be pioneering this work, an incremental approach may be necessary and preferred. The District and its stakeholders may want to limit the scope of the initial data set, and expand as all components of the EHR and HIE systems mature.

Recommendation 1 c: Align new EPSDT compliance and quality resources with overarching DHCF and District quality improvement efforts, working with both providers and MCOs to support ongoing EPSDT-specific reporting, compliance, and quality improvement.

As described in these recommendations, a new methodology for reporting, compliance and quality improvement for the District would include three major components:

1. Adoption of national eMeasures;
2. Development of EHR-enabled EPSDT oversight and quality data set to augment measures for HealthCheck specifications; and
3. The use of this data to improve well child quality in the District by aligning EPSDT quality improvement efforts with the overall District health quality strategy.

As discussed, key informants expressed frustration with the current state of well child quality measurement within the District: with its focus on efforts to track specific elements of the well child visit in an effort to comply with *Salazar* requirements, several noted that opportunities to actually improve well child care were being missed. In contrast, in the District's broader Medicaid quality improvement strategy, DHCF deploys a robust quality improvement methodology that uses reporting of national quality measures by MCOs (currently driven primarily by claims data) to track pay for performance goals. Learning collaboratives drill down into specific areas for quality improvement, and work collaboratively with the MCO medical community to develop and implement solutions. By adopting national measures, using emerging EHR data capacity as described, and integrating these efforts and new measurement methodologies into this existing DHCF quality strategy, the District can explore ways to bal-

ance important reporting and compliance needs with efforts to actually improve, and not only count, well child care.

New data and reporting capacity in the District can support an integrated and targeted quality improvement strategy for the HealthCheck program. Developing an EPSDT oversight and quality improvement data set that includes data elements captured and reported from EHRs, in addition to other data elements (some of which may remain claims-based, others gathered in databases and available through the Patient Data Hub), has the potential to provide the District with a wealth of data on individual screening activity. This data can then be used to support an integrated quality improvement strategy for the District to replace or enhance certain tracking and counting activities. A data-driven quality strategy for the District's EPSDT HealthCheck benefit could, for instance, involve the following core activities:

- *Identification of baseline measurement:* Using EHR-created data that is aggregated at the DC HIE and transmitted to the Patient Data Hub, the District can develop a detailed baseline picture of well child visits in the District, including data queries that support analysis and review of individual assessments (dental, hearing, developmental, etcetera) and other components of the visit. This baseline could be used to establish a starting point for specific quality improvement initiatives, and enable prioritization and focus on specific *Salazar* oversight and quality improvement activities.
- *Establishment of benchmarks:* With an accurate baseline, the District's existing quality improvement structure can be engaged to identify benchmarks (or use existing quality guidelines, such as those built into the HealthCheck program) and goals for specific EPSDT problem areas.
- *Targeting Quality Improvement:* Current District's quality improvement strategies can be employed, such as the use of learning collaboratives to address any identified well child assessment or screening deficits. DHCF can engage MCO and fee-for-service providers, plans, and medical directors to assist in the development of these strategies. Quality improvement efforts that target the District's fee-for-service pediatric providers can be aligned with these activities as well.
- *Feedback:* Data fed back to plans and providers can illustrate progress and/or continued need for improvement.

These quality improvement cycles – as they are currently implemented within the District – can be reconfigured as improvements are realized and new priorities identified. Key to this structure is the use of data to improve care, and the integration of the strategy into existing quality improvement activities.

Engage MCO, PICHQ, and HealthCheck Provider Education Portal in quality improvement processes. In addition to a high-functioning quality improvement strategy within DHCF, the District can deploy a variety of provider and community assets to support and enhance the District quality strategy. The HealthCheck Portal, for instance, is a significant resource in reaching pediatricians with quality improvement resources and education. The PICHQ is another valuable resource that has been instrumental in identifying quality improvement priorities and developing and implementing specific strategies.

As in the broader quality improvement strategy for the District, the Medicaid MCO plans have a key role to play in quality improvement. Current quality efforts indicate that leveraging Plan expertise in quality improvement has been a successful strategy, allowing the District to benefit from MCO innovations and targeted efforts focusing on their provider networks.

OBJECTIVE 2: SUFFICIENT PEDIATRIC EHR CAPACITY

Recommendation 2a: Achieve a critical mass of adoption and use of pediatric – appropriate EHR systems by providers within the District who serve the District’s Medicaid-eligible children.

Having fully operational and well-utilized EHR capacity throughout the District is fundamental to moving forward with an EHR-supported oversight and quality improvement initiative. As noted, the District has a solid foundation on which to build this capacity, and is situated to realize a high functioning pediatric HIT and HIE system. While significant effort will need to be directed to this initiative, the District is positioned to fully development pediatric

HIT capacity by taking advantage of emerging national tools and guidance, and further connecting and finalizing key pieces of HIT infrastructure.

Existing provider EHR capacity in the District is promising. EClinicalWorks is used by about half of pediatric providers, and these providers see an estimated 50 percent of the Medicaid eligible children in the District. The major resources of the DC HIE initiative – which includes six community health centers and three hospitals, coupled with the expansive IQ Network, are other key assets for the District. The Unity network also uses the eClinicalWorks platform. Wide adoption of the eClinicalWorks platform means that standardizing the data format for specific District compliance and quality improvement activities can be accomplished across broad swaths of the District providers at a time. In addition, widespread use of eClinicalWorks in the District make this platform more attractive to individual providers who have not yet selected an EHR, creating more of a base for initial efforts. However, important challenges and opportunities remain, specifically in fully identifying provider gaps, reaching out to providers who have not yet engaged in EHR adoption, and leveraging existing resources within the District to promote pediatric EHR adoption and use. Moreover, the District has yet to finalize and submit its Medicaid HIT Plan; moving this forward will allow funding to begin flowing to eligible providers and should accelerate EHR adoption.

The District can leverage the Regional Extension Center to target pediatric EHR adoption and capacity.

Challenges remain between the current state of the District provider capacity and the future state of full EHR use among District pediatricians. Development of pediatric EHR capacity will need to be prioritized within the overall HIT adoption strategy for the District. The primary locus of responsibility for these efforts lies with the District’s Regional Extension Center (eHealthDC); however, this work can be supported and facilitated in a number of ways through DHCF, the State Medicaid HIT Plan, the office of the District HIT Coordinator, and in collaboration on the State HIE plan.

EHealthDC can assist the District in developing an accurate gap assessment for pediatric EHR adoption.

An accurate picture of the EHR implementation landscape going forward is critical in order to identify gaps and target resources to foster EHR adoption by all EPSDT eligible providers. The District can explore partnering with eHealthDC to develop an accurate gap assessment of pediatric provider EHR adoption as an integrated part of REC activities.

Adoption and capacity issues may be of particular concern for those providers who are not in the traditional pediatric practice. School-based health centers and mobile clinics, for instance, provide HealthCheck services in the District; some of these providers may need particular support in reaching meaningful use of EHRs, or may have difficulty accessing funds due to eligibility requirements of the Medicaid Incentives Program.³² Reaching out to both nontraditional providers and smaller practices will be important in developing full reporting capacity for the District.

The District can explore alternate strategies for providers who are not eligible for the Medicaid Incentive Program. Pediatricians whose practices handle caseloads composed of at least 20% Medicaid-enrolled children are eligible to receive Medicaid Incentive payments for meaningful use of EHRs.³³ The District may need to

explore other leverage points to encourage full adoption of EHRs and full participation in digital oversight and quality improvement processes. For instance, the District may want to include the ability to report data from the EHR as a requirement for participation in a Medicaid MCO network, or use other incentives and leverage points to encourage additional adoption. Provider incentive payments – for instance, enhancements to become a patient-centered medical home – could also be leveraged.

In partnering with the REC, the District can support strategies and resources tailored to assist pediatric providers with EHR adoption. Use of EHRs for a pediatric population requires some adaptation and modification of the general EHR to fully support the needs of this population. Work initiated through CHIPRA to improve the pediatric EHR³⁴ could be incorporated as training and/or requirements for certified EHR capability in the District. eHealthDC can also assist providers in identifying products that best support these pediatric data elements.

In addition, the District, in working with the REC, can encourage the use of EHR technology that supports and engages families. EHRs can facilitate the provision of Bright Futures-endorsed anticipatory guidance by, for example, clinical supports that offer developmentally appropriate anticipatory guidance menu options or reminders.³⁵ Family engagement can also be encouraged by the use of electronic pre-visit questionnaires that can be incorporated into the child's EHR. Parent and child agenda items identified in the questionnaire can be used to help arrange anticipatory guidance queries in the EHR. The Resource and Patient Management System Electronic Health Record used by the U.S. Indian Health Service employs a well child health care module that allows providers to use the EHR to display specific anticipatory guidance topics and standards during a visit.³⁶

The District can engage pediatric providers with advanced EHR capacity to assist other providers with EHR adoption and to begin to collect and report key Medicaid and EPSDT data. The IQ Network, as a high functioning and child-focused HIE network, is another important resource for advancing pediatric EHR adoption in the District. The work that the IQ Network has done in spreading EHR implementation with affiliated practices and adapting key data elements from the SMRF to its eClinicalWorks platform could be leveraged. The IQ Network has had success in supporting the implementation of eClinicalWorks to both independent providers and those affiliated with the Children's Medical Center. In neighboring Maryland and Virginia, for instance, the IQ Network has had a subcontractor relationship with regional extension centers to provide support and technical assistance to pediatricians – particularly in relation to adoption of the eClinicalWorks platform. DHCF, in collaboration with eHealthDC, can again leverage this peer-to-peer technical assistance experience and glean lessons learned applicable to District EHR capacity building.

Leveraging the Medicaid EHR Incentive program and other Medicaid financing strategies can accelerate pediatric EHR adoption Draft versions of the HIE Strategic Plan for the District already identify EPSDT reporting as a component of emerging HIE sustainability.³⁷ Similarly, EPSDT reporting can provide additional incentives to pediatric providers to adopt EHRs. Working in partnership with eHealthDC, DHCF can encourage pediatric providers by identifying EPSDT reporting as a requirement that will be facilitated by EHR adoption. Requiring EHR-created data for reporting purposes (whether to the MCO or to DHCF/Patient Data Hub directly) would incentivize the need for EHRs among District pediatric providers. Provider expectations that they will need this capacity in order to join a Medicaid MCO network, for instance, would also increase the value of EHR implementation.

The District may also want to work with the eHealthDC to highlight specific EPSDT-related meaningful use menu options and clinical quality measures. Transmission of immunization data is a stage one meaningful use functionality, while the NCQA immunization measure can be selected from the clinical quality measures menu to fulfill meaningful use requirements. Highlighting how pediatric providers can use EPSDT-related EHR data to fulfill multiple reporting purposes can make adoption more attractive for pediatric practices.

OBJECTIVE 3: DISTRICT HIE CAPACITY AND OPERATIONS THAT SUPPORT EPSDT OVERSIGHT AND QUALITY IMPROVEMENT

Recommendation 3a: Incorporate and operationalize priorities for achieving pediatric/Medicaid and EPSDT data sharing capacity as part of the District's Strategic and Operational planning under HITECH.

The District is in the process of receiving approval from the Office of the National Coordinator for its HIE Strategic and Operational plans, and has articulated its path forward for the expansion and full operation of the DC HIE. Using the DC RHIO data repository model, the HIE will receive health care information from District providers directly from the EHR. Once at the DC HIE, digital health information on the Medicaid-enrolled population will be available to the Medicaid Patient Data Hub, allowing DHCF to

access a rich data resource for analyzing health care utilization and quality among its Medicaid population. This analytics function is being developed and managed via contract with MedPlus, a data analysis and management company currently under contract with the District. DHCF will be able to query the Patient Data Hub for information such as utilization and quality reports, including those pertinent to EPSDT-enrolled children.

The District is well-positioned to use this emerging infrastructure to track and analyze the delivery of well child services. As discussed, the DC RHIO is currently supporting the exchange of health care information across a variety of community health centers and hospitals. However, specific linkages and components of the framework will need to be developed in order to ensure the full availability and exchange of data to measure and improve EPSDT services. Importantly, business and data sharing agreements – especially between the District and the IQ network, a significant HIE “sub-node” for the DC HIE - need to be revised and executed before data can flow between providers and the HIE. Critically, the communication pathways from EHR to the HIE and then to the Patient Data Hub will need to be specified and finalized at the technical level across systems.

The District has a critical role to play in prioritizing and formalizing the remaining pieces of infrastructure in order to support EPSDT oversight and quality improvement. The District is both a stakeholder and, more formally, a part of the governance structure in the planned DC HIE. In accordance with the District's draft HIE strategic plan:

“DHCF will maintain a key position in the DC HIE governance structure through the HIE PMO as well as membership on the Board of Directors. The HIE PMO (project management office) will act as the conduit between DHCF and DC HIE to insure the activities of the public/private partnership adhere to the guidance and requirements of the State HIE Cooperative Agreement program. As overseer of DC's Medicaid program, ONC Cooperative Agreement grantee, and as a member of the DC HIE governing board, DHCF will ensure HIE activities are in alignment with DC Medicaid plans and activities.”³⁸

This role provides an important leverage point for the District in prioritizing and formalizing key pieces of the HIE plan as they relate to EPSDT compliance and quality improvement.

Leveraging existing exchange data resources can provide additional sources of data. The District already has an operational and widely used immunization registry. This registry uses data provided by pediatricians and others through a web portal to create a District-wide database of immunization rates for children. This database will be linked to the DC HIE, providing an additional data source for District reporting, compliance, and quality improvement activities when a child receives immunizations at a location other than the pediatrician's office. In the near future, the District may want to review how this can be enhanced or streamlined through use of EHR-created data, linkage to the DC HIE, and aggregation and analysis at the Patient Data Hub.

The District can prioritize key pieces of its HIE plan in order to support EPSDT oversight and quality improvement. Functionality for EPSDT reporting and compliance activities is integrated into the District's overall HIE planning. By highlighting and fully articulating activities to prioritize EPSDT functionalities, the District can make important strides in pediatric interoperability and EPSDT reporting capacity. Remaining pieces of infrastructure include:

1. The participation of all necessary pediatric providers in the DC HIE: The DC HIE estimates that currently, six community health centers and three hospitals are using the DC RHIO to exchange information, and this number is growing. However, major pediatric providers have not yet linked to the DC RHIO, specifically, the IQ Network. Prioritizing the finalization of these linkages so that data exchange can begin with this major sector of the DC children's health care system will provide significant new exchange capacity for the District.
2. Technical needs and specifications for the Patient Data Hub to be able to receive, query and analyze new EPSDT data fields (MedPlus): The Patient Data Hub will serve as the resource for DHCF in aggregating Medicaid-specific data so it can be used by the District for oversight and quality improvement. In order to fulfill this function for EPSDT services, contractor must develop specific query formats, reporting templates, and other technical components that will allow it to extract data from the HIE and develop quality reporting tools for DHCF. This work will need to be articulated for the vendor and formalized through agreement with DHCF.

EPSDT oversight and quality improvement will require a detailed technical work plan that maps out linkages and communication pathways for EPSDT-specific information. Certain HIE-supported activities as described in this report are operational within the District. Ensuring all functionality and data exchange capacity for EPSDT-specific purposes, however, will entail an EPSDT-focused technical plan that fully describes processes, interfaces, and technical needs associated with extracting, aggregating, analyzing and using EHR-created data to meet EPSDT goals. This work plan is further described in the next section, and detailed in the Key Tasks and Timeframes table (Appendix F).

OBJECTIVE 4: DISTRICT LEADERSHIP AND INFRASTRUCTURE TO COORDINATE AND ALIGN HIT, HIE AND EPSDT QUALITY EFFORTS

4a. Identify key interdepartmental and public-private leadership and organizational structures to support new capacity development for HIT-HIE enabled EPSDT reporting, compliance, and quality improvement activities

4b. Develop and execute a comprehensive plan for executing the EPSDT Oversight and Quality Improvement Strategy detailing timelines and key tasks

District leadership and resources for EPSDT, quality improvement, and HIT/HIE development are separated by differing priorities and housed within different agencies across District. Reorganization of the DHCF functions will assist in closer collaboration on these issues. However, a joint or coordinated leadership, as well as a coherent work plan, is critical to achieving the objectives described in this report.

4a. Identify key interdepartmental and public-private leadership and organizational structures to support new capacity development for HIT-HIE enabled EPSDT oversight and quality improvement activities

The EPSDT measurement and quality improvement strategies outlined in this report are inextricably linked to the District's quality improvement infrastructure, full development of EHR capacity and a high functioning HIE. Successfully bridging these multiple and complex systems in order to create a high-functioning EPSDT oversight and

quality improvement system requires structural and governing support and a clear project management orientation to succeed. Other components of the EPSDT system – MCOs, District providers (including fee-for-service providers), the PICHQ and the Regional Extension Center – may also have formal and informal roles in creating this system. Contracting, policy and roles and responsibilities among key stakeholders may need to change to support this emerging infrastructure.

The EPSDT Oversight and Quality Improvement Strategy will require clear leadership (or co-leadership) with appropriate visibility and authority to make key decisions and act on policy, contract, and other emerging issues on behalf of DHCF pertaining to both EPSDT and HIT/HIE. Addressing the key objectives and recommendations outlined in this report will require leadership that can engage multiple facets of the District’s health care infrastructure, convene a variety of stakeholders, and build partnerships. The resulting work could serve as an important pilot or template in the use of eMeasures and EHR data for other purposes within the District health care system. This work will require significant visibility within the District government, and the engagement of key leaders who will lend the project credibility and importance in order to accomplish priority tasks. This leadership may have an HIE focus or a quality improvement focus, or may be better supported with a shared leadership structure in order to manage the multiple aspects of this work at the intersection of technology and quality improvement.

Implementation of the Strategy could be supported by the creation of an EPSDT Oversight and Quality Improvement Work Group that includes key stakeholders. The establishment of a high-level work group that can be engaged in implementation as well as oversight of future progress could facilitate achievement of important objectives. DHCF and the office of the HIT Coordinator already have collaborative relationships with key stakeholders. These stakeholders are generally familiar with the challenges of EPSDT oversight and quality improvement in the District, and many of these stakeholders have had key problem-solving roles in *Salazar* and EPSDT compliance activities. Certain groups already come together with regularity: DHCF meets regularly with pediatric providers and MCO representatives to discuss EPSDT issues. The office of the HIT Coordinator, as a part of its work on the SMHP and HIE strategic and operational planning, works within a collaborative governance structure with the DC RHIO. Tapping into these various processes will allow the District to identify key stakeholders. Box 4 contains an initial list of potential stakeholders for this work.

Box 4: Key Stakeholders	
DHCF Leadership	External Stakeholders
HIT Coordinator DHCF EPSDT Coordinator Medicaid Patient Data Hub Office of Quality Improvement	Representatives of the PICHQ DCPCA DC RHIO eHealthDC IQ Network/CNMC and unaffiliated providers School-based Health Centers MedPlus MCO quality representatives EPSDT family representatives HealthCheck Provider Portal/Bright Futures Plaintiffs’ Attorneys Representation from the Court AAP representatives

Recommendation 4b. Develop and execute a comprehensive EPSDT oversight and quality improvement strategy detailing timelines and key tasks

Moving from an oversight and compliance process that has focused on claims data and paper-based systems to an integrated, EHR and HIE-enabled oversight and quality improvement strategy is a complex process. Certain timelines and tasks will be dependant on external resources (e.g., re-tooling of eMeasures, development of pediatric EHR standards, Medicaid incentive funding). Much of the work will require cross-agency and/or public-private partnerships and collaboration. Identifying leadership and project management structure, resources, specific tasks and roles and responsibilities across the plan will be critical to its success.

Implementation will require the development and execution of an EPSDT Oversight and Quality Improvement Work Plan Elements of this work plan are further detailed in Appendix.

Important components of the work plan include:

1. Identification of leadership, project management, and locus of activity (within DHCF) for the project
2. Convening work group
3. Identification and/or leveraging of resources, including
 - a. Medicaid administrative and/or quality improvement funding
 - b. Medicaid Incentives Program resources
 - c. State HIE funding
 - d. Regional Extension Center in-kind and/or contracting resources
 - e. Existing DHCF human resources, including re-deployed *Salazar* compliance resources, quality improvement staff and resources
 - f. Grant or project funding
 - g. In-kind resources from external District providers, hospitals, etc.
4. Key tasks and timeframes, including:
 - a. Selection and consensus on initial eMeasures and phase-in plan
 - b. Identification of the EPSDT Oversight and Quality Improvement Data Set
 - c. Protocols for each component of the oversight and quality improvement strategy as new data capacity comes online
 - d. Targeted Pediatric Provider/Medicaid Incentives Strategy
 - e. EPSDT Technical Work Plan

Implementation will require clarification of roles and responsibilities, and consideration of the implications for the District in using a new quality reporting capacity. The use of national eMeasures and an EHR-enabled data set may require changes in how DHCF interacts with various components of its Medicaid system. Changes in how data is created, exchanged, and used may necessitate changes in contract, policy, and partnerships.

- a. **Data flow:** A major change embedded within these recommendations is that DHCF will no longer need to rely solely on the MCO plans to aggregate and report on claims-based data for CMS 416 and *Salazar* compliance. Depending on how DHCF ultimately decides to structure data reporting, data could flow from the provider EHR to the DC HIE, and then to the Patient Data Hub, where it could be aggregated with other pieces of information to create oversight and quality improvement reports. The MCO may continue to supply administrative data for a variety of purposes, but could also receive data and quality reports generated from the Patient Data Hub via DHCF. These evolving scenarios may require a review and amendment of MCO reporting and contractual obligations. Provider contracts and reporting responsibilities would also need to

be reviewed and realigned with EHR-enabled reporting capacity. What is reported, when, and to what entity will need to be developed and formalized.

- b. **Quality Improvement Strategy:** The alignment of *Salazar* compliance and well child quality improvement could mean an increased role for the District Quality Improvement Office in *Salazar* compliance. Convening specific learning collaboratives on well child screening, for instance, instead of tracking screening procedures generally, could involve a closer collaboration than currently exists between the District EPSDT Coordinator, the Quality Improvement office, and perhaps the Plaintiffs' and District attorneys. This work may also entail an increased emphasis on EPSDT quality improvement and innovation at the MCO level, and a shift from court-focused Corrective Action Plans to a more nimble plan-do-study-act methodology.
- c. **Health Information Exchange:** An enormous amount of work has already gone into the development of the District's HIE. As a result, many of the issues faced by other systems – technical architecture, data exchange agreements, opt in/opt out design, privacy concerns, and similar start-up issues, appear to have been mapped out, and will need to be operationalized across the District. Outstanding HIE issues related to roles and responsibilities in the HIE environment regarding EPSDT should be an additional but finite group of issues, such as remaining connection points to the HIE, finalizing operational agreements between and among major networks, the HIE, and the Patient Data Hub with regard to EPSDT, and assuring that all expected and necessary functionality can be accomplished.
- d. **CMS reporting:** Current CMS-416 reporting is based on claims data that is used as a proxy for completed well child visits. Changes in data collection and reporting that impact current CMS-416 reporting methodology would need to be developed through communication and collaboration with CMS EPSDT leadership.
- e. **Additional partners:** The District may identify other needs that change existing roles and responsibilities, either formally or informally. Fully engaging the PICHQ, the IQ Network, eHealthDC, and other partners, for instance, may require new contracting relationships and reallocation of resources.

CONCLUSION

The national landscape of children's quality measurement and improvement offers opportunities to more accurately and uniformly measure the quality of well child services. Emerging national efforts, including the identification of the CHIPRA core measure set, the development of pediatric EHR standards, and emerging national measures for well child services also support the trend toward a national measurement system for children's health care. At the same time, the enormous potential in widespread adoption and meaningful use of pediatric EHRs, coupled with growing HIE capabilities and the re-tooling of national quality measures to the eMeasures format, make this a critical juncture in the development of digital capacity and full EHR-enabled health care measurement and improvement.

The District is positioned to capitalize on existing investments and emerging resources in EHR, HIE, and quality infrastructure. Its highly engaged and digitally savvy pediatric provider community forms a solid foundation to move EHR use to full capacity across the District. Investments in HIE over the past decade are now aligning to form a coherent system for health information exchange: this exchange is now a reality in the District, and capacity is growing.

The District's quality infrastructure is also well-established. The District's HealthCheck benefit, based on Bright Futures—the national initiative for well child care—forms the core of well child services for the District's Medicaid-enrolled children. Comprehensive educational resources and supports are readily accessible to pediatric providers through the HealthCheck Portal. In addition, the District's overarching quality improvement strategy provides an existing methodology and structure for health care quality improvement, using measurement, learning collaboratives, and MCO quality improvement expertise.

Challenges should not be minimized, however. Without concerted leadership, a dedication of resources, and an integrated focus on EPSDT throughout multiple spheres of activity across District government, the objectives outlined in this report may not be reached. EHR capacity in the District among pediatric providers needs further analysis. The District must finalize both its HIE planning documents and begin implementation; Its Medicaid State HIT Plan must be completed and approved in order to draw down federal resources. And the detailed task of identifying national measures and additional data needs will be difficult work.

That said, the District is poised to create a digital compliance and quality strategy that can support EPSDT reporting, *Salazar* compliance, and well child quality improvement. By adopting national measures, developing a compliance and quality data set, and redirecting compliance toward actionable quality improvement measures and activities, the District can be a leader in the delivery and documentation of high-quality well child care. While this report does not minimize the very significant effort that would be involved in this transition, the potential benefits are real and substantial as well. Fully embracing and deploying emerging technology to support oversight and quality improvement could position the District to resolve long-standing and costly compliance issues associated with its EPSDT program; this work could also serve as a national model for EPSDT oversight and children's health quality measurement.

APPENDICES

APPENDIX A: NQF MEASUREMENT EVALUATION CRITERIA

NQF's measurement evaluation criteria include four main stipulations: the measure must be important, it must produce consistent and reliable results, it must be useful for its intended audience, and it must be feasible to implement.¹ These criteria are elaborated upon in the table below.

Criteria Domains	Measure Characteristics
1. Impact, Opportunity, Evidence—Importance to Measure and Report	High Impact: Addresses a specific national health goal/priority or a demonstrated high-impact aspect of health care
	Performance Gap: Demonstrates quality problems and offers opportunities for improvement
	Evidence to Support the Measure Focus: Has a focus that is a health outcome or is evidence-based
2. Reliability and Validity—Scientific Acceptability of Measure Properties	Reliability: Is well-defined, precisely specified, and has undergone reliability testing
	Validity: Is consistent with relevant evidence, has undergone validity testing, and is supported by clinical evidence
	Disparities: Allows for identification of disparities through stratification of results
3. Usability	Demonstration that information produced for measure is meaningful, understandable, and useful to the intended audience for public reporting
	Demonstration that information produced for measure is meaningful, understandable, and useful to the intended audience for informing quality improvement
4. Feasibility	For clinical measures, the required data elements are routinely generated and used during care delivery
	Required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified
	Susceptibility to inaccuracies, errors, or unintended consequences, and the ability to audit the data items to detect such problems are identified
	Demonstration that the data collection strategy can be implemented
5. Comparison to Related or Competing Measures	The measure specifications are harmonized with related measures
	The measure is superior to competing measures

1 National Quality Forum. "Measure Evaluation Criteria." January 2011. http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx

APPENDIX B: STAGE 1 MEANINGFUL USE OBJECTIVES FOR ELIGIBLE PROFESSIONALS

The Stage 1 Meaningful Use criteria contain 15 “core set” objectives that providers must meet to qualify as meaningful users of EHR technology. In addition, providers must meet any five of the ten “menu set” objectives.¹

Core Set
Record demographics (gender, date of birth, insurance type, language, race, ethnicity)
Record and chart changes in vital signs (height, weight, blood pressure, BMI, growth charts)
Maintain up-to-date problem list of current and active diagnoses
Maintain active medication list
Maintain active medication allergy list
Record smoking status for patients 13 years of age or older
Provide patients with clinical summaries for each office visit
Provide patients with an electronic copy of their health information upon request
e-Prescribing
Computer provider order entry (CPOE) for medication orders
Implement drug-drug and drug-allergy interaction checks
Implement capability to electronically exchange key clinical information among providers and patient-authorized entities
Implement one clinical decision support rule and ability to track compliance with the rule
Implement systems to protect privacy and security of patient data in the EHR
Report clinical quality measures to CMS or the states
Menu Set
Implement drug formulary checks
Incorporate clinical laboratory test results into EHRs as structured data
Generate lists of patients by specific conditions to use for quality improvement reduction of disparities and outreach
Use EHR technology to identify patient-specific education resources and provide those to the patient as appropriate
Perform medication reconciliation between care settings
Provider summary of care record for patients preferred or transitioned to another provider or setting
Submit electronic immunization data to immunization registries or immunization information systems
Submit electronic syndromic surveillance data to public health agencies
Send reminders to patients for preventive and follow-up care
Provider patients with timely electronic access to their health information

¹ David Blumenthal and Marilyn Tavenner, “Summary Overview of Meaningful Use Objectives.” The New England Journal of Medicine, 13 July 2010. http://healthpolicyandreform.nejm.org/?attachment_id=3742. Meaningful use objectives for eligible hospitals are largely the same as those for eligible professionals, but do differ on a few points.

APPENDIX C: CHIPRA CORE SET

CMS, in partnership with the AHRQ, has developed the initial core measure set of children's health quality measures, required by Section 401 of the Children's Health Insurance Program Reauthorization Act. Criteria for selection of the measures included that they: be drawn from measures already in use to measure children's health care quality; cover a full array of health care quality domains, a broad array of health care services affecting children, children of all ages, and all children's health care settings and providers; be evidence-based; be understandable to families; and allow identification of disparities by race, ethnicity, socioeconomic status, and special health care need status.

The initial CHIPRA core set appears in the table below.¹

Measure		Measure Steward	Description	Data Source	Website
Prevention and Health Promotion					
1	Frequency of Ongoing Prenatal Care	NCQA/HEDIS	Percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of visits: <21 percent of expected visits 21 percent – 40 percent of expected visits 41 percent – 60 percent of expected visits 61 percent – 80 percent of expected visits >81 percent of expected visits	Hybrid	http://www.ncqa.org/
2	Pre-natal and Postpartum Care: Timeliness of Pre-natal Care	NCQA/HEDIS	The percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year that received a prenatal care visit in the first trimester or within 42 days of enrollment in the organization.	Hybrid	http://www.ncqa.org/

¹ Centers for Medicare & Medicaid Services. "CHIPRA Initial Core Set Technical Specifications Manual 2011." February 2011. <https://www.cms.gov/MedicaidCHIPQualPrac/Downloads/CHIPRACoreSetTechManual.pdf>

Measure		Measure Steward	Description	Data Source	Website
3	Percent of live births weighing less than 2,500 grams	Centers for Disease Control and Prevention	The measure assesses the number of resident live births less than 2,500 grams as a percent of the number of resident live births in the state reporting period.	Medical Record Birth Certificate Data	http://www.cdc.gov/nchs
4	Cesarean rate for nulliparous singleton vertex	California Maternal Quality Care Collaborative	Percentage of women who had a Cesarean section among women with first live singleton births [also known as nulliparous term singleton vertex (NTSV) births] at 37 weeks of gestation or later.	Birth Certificate Data Medical Record	http://www.cmqcc.org/
5	Childhood Immunization Status	NCQA/HEDIS	Percentage of patients who turned 2 years old during the measurement year who had four DTaP/DT, three IPV, one MMR, three H influenza type B, three hepatitis B, one chicken pox vaccine (VZV), four pneumococcal conjugate (PCV), two hepatitis (HepA), two or three rotavirus (RV); and two influenza vaccines by the child's second birthday. The measure calculates a rate for each vaccine and nine separate combination rates.	Hybrid	http://www.ncqa.org/
6	Immunizations for Adolescents	NCQA/HEDIS	The percentage of adolescents 13 years of age who had one dose of meningococcal vaccine and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) by their 13th birthday. The measure calculates a rate for each vaccine and one combination rate.	Hybrid	http://www.ncqa.org/

Measure		Measure Steward	Description	Data Source	Website
7	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/ Adolescents: Body Mass Index Assessment for Children/ Adolescents	NCQA/HEDIS	Percentage of children, 3 through 17 years of age, whose weight is classified based on body mass index percentile for age and gender.	Hybrid	http://www.ncqa.org/
8	Developmental Screening In the First Three Years of Life	Child and Adolescent Health Measurement Initiative (CAHMI) and NCQA	Assesses the extent to which children at various ages from 0- 36 months were screened for social and emotional development with a standardized, documented tool or set of tools.	Hybrid	http://www.cahmi.org
9	Chlamydia Screening	NCQA/HEDIS	Percentage of women 16 through 20 who were identified as sexually active and who had at least one test for Chlamydia during the measurement year.	Administrative	http://www.ncqa.org/
10	Well-Child Visits in the First 15 Months of Life	NCQA/HEDIS	Percentage of members who received zero, one, two, three, four, five, and six or more well child visits with a primary care practitioner during their first 15 months of life.	Hybrid	http://www.ncqa.org/
11	Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	NCQA/HEDIS	Percentage of members age 3 through 6 years old who received one or more well-child visits with a primary care practitioner during the measurement year.	Hybrid	http://www.ncqa.org/

Measure		Measure Steward	Description	Data Source	Website
12	Adolescent Well-Care Visit	NCQA/HEDIS	Percentage of members age 12 through 21 years who had at least one comprehensive well- care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.	Hybrid	http://www.ncqa.org/
13	Total Eligibles Who Received Preventive Dental Services	CMS	Total eligible children age 1 to 20 years who received preventive dental services.	Administrative	http://www.cms.gov/MedicaidEarlyPeriodicScreening/03_State_Agency_Responsibilities.asp
Availability					
14	Child and Adolescent Access to Primary Care Practitioners	NCQA/HEDIS	<p>Percentage of enrollees who are 12 months through 19 years of age who had a visit with a primary care practitioner (PCP). Four separate percentages are reported:</p> <p>Children 12 through 24 months and 25 months through 6 years who had a visit with a PCP during the measurement year.</p> <p>Children 7 through 11 years and adolescents 12 through 19 years who had a visit with a PCP during the measurement year or the year prior to the measurement year.</p>	Administrative	http://www.ncqa.org/
Management of Acute Conditions					

Measure		Measure Steward	Description	Data Source	Website
15	Appropriate Testing for Children with Pharyngitis	NCQA/HEDIS	Percentage of patients who were diagnosed with pharyngitis, dispensed an antibiotic, and who received a group A streptococcus test for the episode.	Administrative	http://www.ncqa.org/
16	Otitis media with effusion (OME) – avoidance of inappropriate use of systemic antimicrobials in children – ages 2 through 12	American Medical Association /PCPI	Percentage of patients age 2 months through 12 years with a diagnosis of OME who were not prescribed systemic antimicrobials.	Administrative EHR	http://www.ama-assn.org
17	Total Eligibles who Received Dental Treatment Services	CMS	Total eligible children age 1 to 20 years who received dental treatment services.	Administrative	http://www.cms.gov/MedicaidEarlyPeriodicScreening/03_State_Agency_Responsibilities.asp
18	Ambulatory Care: Emergency Department Visits	NCQA/HEDIS	The number of visits per member per year as a function of all child and adolescent members enrolled and eligible during the measurement year.	Administrative	http://www.ncqa.org/

Measure		Measure Steward	Description	Data Source	Website
19	Pediatric central-line associated blood stream infections – Neonatal Intensive Care Unit and Pediatric Intensive Care Unit	Centers for Disease Control and Prevention	Central line- associated blood stream infections (CLABSI) identified during periods selected for surveillance as a function of the number of central line catheter days selected for surveillance in pediatric and neonatal intensive care units.	Medical Record	
Management of Chronic Conditions					
20	Annual number of asthma patients 2 through 20 years old with one or more asthma-related emergency room visits	Alabama Medicaid	Asthma emergency department utilization for all children 2 through 20 years of age diagnosed with asthma or treatment with at least 2 short-acting beta adrenergic agents during the measurement year, with one or more asthma-related ED visit.	Administrative	
21	Follow-Up Care for Children Prescribed Attention Deficit Hyperactivity Disorder (ADHD) Medication	NCQA/HEDIS	Percentage of children newly prescribed ADHD medication who had at least 3 follow-up care visits within a 10-month period, one of which was within 30 days from the time the first ADHD medication was dispensed.	Administrative	http://www.ncqa.org/
22	Annual Pediatric hemoglobin A1C testing	NCQA	Percentage of pediatric patients with diabetes and a hemoglobin A1c test in a 12-month measurement period.	Hybrid, EHR	http://www.ncqa.org/

Measure		Measure Steward	Description	Data Source	Website
23	Follow-up after hospitalization for mental illness	NCQA/HEDIS	Percentage of discharges for members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner.	Administrative	http://www.ncqa.org/
Family Experiences of Care					
24	CAHPS® 4.0 (child version including Medicaid and Children with chronic conditions supplemental items)	NCQA/HEDIS	Survey on an individual's experiences of care.	Survey	http://www.ncqa.org/

These measures are currently under public review and comment, and it is envisioned this initial set will evolve over time.

APPENDIX D: CHIPRA DEMONSTRATION GRANTEES¹

State(s)	Proposed Activities
Colorado New Mexico	<ul style="list-style-type: none"> Form Interstate Alliance of School-Based Health Centers (SBHCs) to integrate school-based health care into a medical home approach to improve the health care of underserved school-aged children and adolescents. Utilize SBHCs to improve the delivery of care within the school setting and to improve screening, preventive services, and management of chronic conditions.
Florida Illinois	<ul style="list-style-type: none"> Test collection and reporting of recommended and selected supplemental measures of children's health quality, using existing data sources and improved data sharing. Ensure that ongoing Statewide HIE and HIT efforts support the achievement of child health quality objectives. Enhance the development of provider-based systems of care that incorporate practice redesign and strong referral and coordination networks, particularly for children with special health care needs.
Maine Vermont	<ul style="list-style-type: none"> ME will test, develop and expand the use of evidence-based child performance measures. ME and VT will be able to expand their information technology systems in order to improve the exchange of child health data and expedite the provision of services to children in foster care. Both states will test and evaluate a pediatric medical home model that will test the impact of changes in payment reform, implementation of consensus practice guidelines, and provider education on child health outcomes.
Maryland Georgia Wyoming	<ul style="list-style-type: none"> Implement and/or expand a Care Management Entity (CME) provider model to improve the quality and better control the cost of care for children with serious behavioral health challenges who are enrolled in Medicaid or CHIP. <ul style="list-style-type: none"> » The CME will incorporate wrap-around services, peer supports, and intensive care coordination. Utilize the CME model to improve access to appropriate services and employ HIT to support clinical decision making. <ul style="list-style-type: none"> » Model will be designed to reduce unnecessary use of costly services, improve clinical and functional outcomes for children and youth with serious behavioral health needs, and involve youth and their families in care decisions.

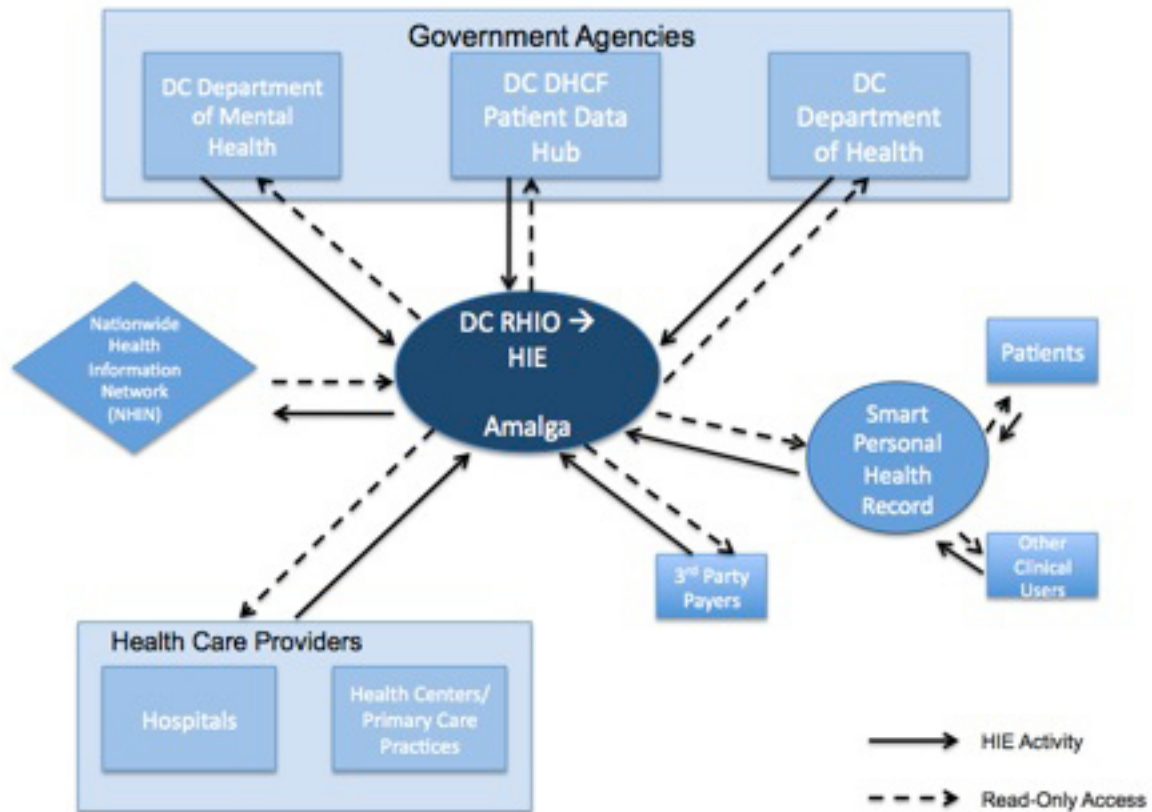
1 "CHIPRA Quality Demonstration Grants—Summary." http://www.insurekidsnow.gov/professionals/CHIPRA/grants_summary.html

Massachusetts	<ul style="list-style-type: none"> • Apply and evaluate recommended measures of children's health care quality and make comparative quality performance information available to providers, families, and policymakers. • Use learning collaboratives and practice coaches to support the process of transforming pediatric practices into medical homes that provide family and child-oriented care, measure and improve that care, and enhance outcomes, particularly for children with targeted conditions: Attention Deficit and Hyperactivity Disorder, asthma, and childhood obesity.
North Carolina	<ul style="list-style-type: none"> • Build on a strong public-private partnership that has documented successes in quality improvement, efficiency and cost-effectiveness of care for more than 12 years. • Implement and evaluate the use of recommended quality measures and strengthen the medical home for children with special health care needs by testing and evaluating three provider-led community-based models. <ul style="list-style-type: none"> » Models will be used to identify, treat, and coordinate care for children with special health care needs, particularly children with developmental, behavioral, and/or mental health disorders. • Implement a model electronic health record format for children.
Oregon Alaska West Virginia	<ul style="list-style-type: none"> • Test the combined impact of patient-centered care delivery models and HIT in improving the quality of children's health care. • The three States will work together to: <ul style="list-style-type: none"> » Develop and validate quality measures, » Improve infrastructure for electronic or personal health records utilizing HIEs, and » Implement and evaluate medical home and care coordination models.
Pennsylvania	<ul style="list-style-type: none"> • Test and report on recommended pediatric quality measures and promote the use of HIT in health care delivery to maximize the early identification of children with developmental delay, behavioral health issues, and those with complex medical conditions. <ul style="list-style-type: none"> » This will facilitate coordination of care with the primary care practitioner medical home, medical specialists, and child-serving social service agencies. • A pre-clinic visit assessment is expected to enhance communication between providers and patients, and an electronic tracking system will link children with special needs to appropriate services. • Implement a model electronic health record format for children.

South Carolina	<ul style="list-style-type: none"> • Build a quality improvement infrastructure that enhances the ability of the state's pediatric primary care practices to establish medical homes that effectively coordinate and integrate physical and mental health services. • HIT will be used to gather, aggregate, and report on outcomes data to support the provision of evidence-based care, and to allow peer-to-peer comparisons. • Automate data collection of, and feedback on, recommended child health quality indicators in 15 pilot practices. • Practices will participate in learning collaboratives.
Utah Idaho	<ul style="list-style-type: none"> • Develop a regional quality system guided by the medical home model to enable and assure ongoing improvement in the healthcare of Medicaid & CHIP children. • Focus on improving health outcomes for children and youth with special health care needs through the EHRs, HIEs, and other HIT tools. • Pilot a new administrative service using Medical Home Coordinators embedded in primary and sub-specialty care practices to support ongoing improvements in care, coordination of care, and support for children with chronic and complex conditions and their families. • Use learning collaboratives, practice coaches, and parent partners to train primary and sub-specialty child health practices in medical home concepts. • Ultimate outcome will be improved health care for children in the two states, robust integration of HIT into child health practices, and a regional quality system and valuable quality improvement tools and resources that can be shared with other states and regions.

APPENDIX E: DC HIE SCHEMATIC AND HIE STRATEGIC PLAN EXCERPT

The figure below is a simplified schematic of the information flow through the District's health information exchange (housed at the DC RHIO).



The table on the next page illustrates additional HIE projects and provider capacity in the District, as described in the District's HIE Strategic Plan.

HIT Adoption Efforts¹

Initiative	Description	EHR Platform
Children's IQ Network	<p>Children's National Medical Center is developing a pediatric HIE connecting 600 physicians. Participating physicians are provided with an EHR that will report data into a central database. The IQ Network connects:</p> <ul style="list-style-type: none"> • Children's National Medical Center • CNMC's six Goldberg Ambulatory Pediatric Clinics • CNMC's foster care program • Mobile medical vans 	eClinicalWorks
DC PCA Medical Homes EHR Project	<p>Six initial primary care clinics are being outfitted with electronic health records with a special public health enhancement. These clinics are:</p> <ul style="list-style-type: none"> • Mary's Center • So Others Might Eat (SOME) • Whitman-Walker Clinic • Family and Medical Counseling Service • La Clinica del Pueblo • Bread for the City 	eClinicalWorks
HRSA High Impact – EHR Implementation Initiative Grant	The Unity Health, Inc. FQHC Network was awarded a grant from the federal Health Resources & Services Administration in 2007 to install EHRs in its member clinics.	eClinicalWorks
e-Prescribing	82% of the District's licensed pharmacies are capable of receiving prescriptions and refilling orders electronically. Among the District's retail-based community pharmacies, the percentage is even higher: 92% of these pharmacies have e-Prescribing capabilities. Surescripts data from 2009 also shows that 19% of the District's physicians route prescriptions electronically and 7% of eligible prescriptions are routed electronically.	Surescripts

¹ The information in this table was obtained from a draft of the District of Columbia Health Information Exchange Strategic Plan.

APPENDIX F: KEY TASKS AND TIMEFRAMES

The table below details additional information on implementing the recommendations detailed in this report. It is important to note that the start dates and timeframes for completion of various pieces of work described in this table are estimates, and as such are subject to change: timeframes are highly dependent on the prioritization of this work by District and DHCF leadership, allocation of resources which may include legislative decisions and other funding contingencies that go beyond the scope of this report, and factors external to the District, such as the finalization of eMeasure specifications.

Task	Description/additional information	Start date and Estimated time frame; key dates
Identification of DHCF leadership or shared leadership strategy	<p>Identify leadership (or co-leadership) with appropriate visibility and authority to make key decisions and act on policy, contract, and other emerging issues on behalf of DHCF pertaining to both EPSDT and HIT/HIE</p> <p>1. Project Management Infrastructure</p> <p>a. Identify and/or leverage resources, including:</p> <ol style="list-style-type: none"> 1. Medicaid administrative and/or quality improvement funding i. Medicaid Incentives Program resources ii. State HIE funding iii. Regional Extension Center in-kind and/or contracting resources iv. Existing DHCF human resources, including re-deployed Salazar compliance resources, quality improvement staff and resources v. Grant or project funding vi. In-kind resources from external District providers, hospitals, etc. vii. Designate internal work group and staffing <p>b. Convene EPSDT Work Group</p>	<p>Start date: June 1, 2011</p> <p>3 months</p>
EPSDT Oversight and Quality Improvement Work Plan	Development of work plan	<p>Start date June 1, 2011</p> <p>3 months</p>

Task	Description/additional information	Start date and Estimated time frame; key dates
Adoption of national eMeasures	<ol style="list-style-type: none"> 1. Identification of those measures that most closely align with EPSDT compliance and quality objectives and have additional value and/or potential due to inclusion in HEDIS, CHIPRA Core Measures, Meaningful Use, or other District reporting activity 2. Development of protocols deemed necessary for piloting or phase-in to use eMeasures for EPSDT quality reporting among the various pediatric/ EPSDT providers 	<p>Start date Sept. 1 2011</p> <p>4-6 months</p> <p>June 2011: NQF eMeasure Format Review Panel will meet to evaluate comments from NQF members and the public on 113 retooled (into an electronic format) measures</p> <p>NQF Consensus Standards Advisory Committee will consider endorsement of Child Health Quality Measures 2010 measures</p> <p>Format development of pediatric model EHR complete</p> <p>December, 2011 NQF Consensus Standards Advisory Committee will receive NQF eMeasure Format Review Panel's recommendation of substantive change for further action</p> <p>Deadline for states to submit data for 2011 on voluntarily CHIPRA core quality measures</p> <p>Early 2012: NQF requires new measures submitted for endorsement to be specified as eMeasures</p> <p>January 1, 2013 Publication of recommended changes to CHIPRA initial core quality measure set and new measures</p>

Task	Description/additional information	Start date and Estimated time frame; key dates
Identification of EPSDT Oversight and Quality Data Set	<p>3. Using Standard Medical Record Form and matrix, develop a data set to supplement the use of eMeasures to provide an adequate Oversight and Quality reporting structure for the district's EPSDT program. Data may include:</p> <ul style="list-style-type: none"> a. Data necessary to track the additional periodicity requirements and specific timeframes applicable to HealthCheck program and/or Salazar reporting b. Specific data elements pertaining to screening and service components (based on the Standard Medical Record Form and Bright Futures/Health-Check requirements), including: <ul style="list-style-type: none"> 1. Dental risk assessment, prevention and direct referral 2. Vision and hearing screening 3. Additional data necessary for lead screening periodicity c. Create crosswalk of data elements required for EPSDT Oversight and Quality Data Set to those available from prevailing pediatric EHRs in the District, starting with eClinicalWorks and spreading to other major platforms d. Leverage the experience and expertise of the Children's Hospital IQ Network in working with cross walking to eClinicalWorks. Consider subcontract w/IQ Network to perform crosswalk work e. Partner with PICH-Q to engage providers in developing methodology to accommodate reporting in relation to clinical workflow 	<p>Start date December 1, 2011</p> <p>4-6 months</p>
Alignment of eMeasures and EPSDT Oversight and Quality Improvement with overall DHCF and District quality improvement strategy	<ul style="list-style-type: none"> 1. Reporting on eMeasures in conjunction with HEDIS reporting 2. Use of eMeasures and data set to identify and support EPSDT-specific Learning Collaborative(s) 3. Prioritization of EPSDT quality measure(s) in MCO QI initiatives and planning 	<p>Start Date: September 1, 2011</p> <p>9-12 months</p>

Task	Description/additional information	Start date and Estimated time frame; key dates
Reporting protocols for each component of the oversight and quality improvement strategy as new data capacity comes online	<ol style="list-style-type: none"> 1. Establish reporting schematic and protocol for each component of the oversight and quality improvement strategy as new data capacity comes online, including <ol style="list-style-type: none"> a. Data flow, frequency, format, data source <ol style="list-style-type: none"> 1. Reporting responsibilities <ol style="list-style-type: none"> i. MCO contracts and reporting responsibilities ii. Provider contracts and reporting responsibilities iii. Other data sources: immunization registry, lead, other b. Role and responsibilities of DC HIE c. Role and responsibilities of PDH d. Role and responsibilities of DHCF 	Start Date March 1, 2012 4-6 months

Task	Description/additional information	Start date and Estimated time frame; key dates
Targeted Pediatric Provider/Medicaid Incentives Strategy as part of the District's Regional Extension Center Program	<ol style="list-style-type: none"> 1. Identify opportunities and priorities for achieving meaningful use among pediatric providers as part of the District's State Medicaid HIT Plan: <ol style="list-style-type: none"> a. Leverage the Medicaid EHR Incentive program and other Medicaid financing strategies to accelerate pediatric EHR adoption <ol style="list-style-type: none"> 1. Support and articulate use case for EPSDT reporting: consider provider participation agreements, MCO plan requirements and other leverage points 2. Leverage Meaningful Use menu options for immunization reporting 2. Address EPSDT priorities for operationalizing the Patient Data Hub <ol style="list-style-type: none"> a. Explore multi-directional quality reporting specific to EPSDT: use emerging data capacity for provider-, plan-, and patient-level actionable communication, reports and QI informatics 3. Partner with the Regional Extension Center, eHealth-DC, to identify and address specific gaps in provider EHR adoption among all Medicaid/EPSDT providers, including school based health centers, mobile clinics and other EPSDT providers 4. Develop strategies and resources tailored to assist these pediatric providers with EHR adoption, including: <ol style="list-style-type: none"> a. Incorporation of emerging pediatric EHR standards being developed under CHIPRA, through Agency for Health Research and Quality b. Identification of EHR products that capture necessary pediatric data elements c. Engagement of District providers with advanced EHR capacity to assist other pediatric providers with EHR adoption and to begin to collect and report key Medicaid and EPSDT data <ol style="list-style-type: none"> 1. Consider the potential for using the Children's Hospital IQ Network to provide peer-to-peer Technical Assistance targeting use of eClinical-Works, a prevailing EHR platform. 	<p>Start Date Sept 1, 2011</p> <p>12-18 months</p> <p>Late summer, 2011: District's State Medicaid HIT Plan is completed</p> <p>December 31, 2011 Reporting year ends for eligible providers pursuing Medicaid EHR Incentive payments</p> <p>March 2012 Estimated release of Standards for model pediatric EHR</p> <p>February 29, 2012 Last day for eligible professionals to register and attest to receive a Medicaid EHR Incentive Payment for calendar year 2011</p> <p>2016 Last year for eligible provider and hospitals to begin the Medicaid EHR Incentive Program</p>

Task	Description/additional information	Start date and Estimated time frame; key dates
EPSDT HIE Technical plan	<p>5. Develop EPSDT HIE Technical plan</p> <p>a. Develop and execute a work plan to operationalize data sharing between pediatric EPSDT providers, MCOs, related data and/or provider resources, and the District HIE, including:</p> <ol style="list-style-type: none"> 1. Technical needs and specifications 2. Timeline and related contingencies 3. Specific action steps and responsible entities <p>b. Prioritize and formalize MCO/health plan and pediatric/EPSDT provider participation in the District's broader health information exchange network (DCPCA).</p> <ol style="list-style-type: none"> 1. Identify and address remaining impediments for linking IQ Network and DC HIE. Establish the HIE interfaces to enable EHR-based data to be shared with the District HIE platform, Amalga 2. Address relationship and technical relationship to other data feeds and interfaces required to link key data sources to the HIE (e.g., immunization registry) in order to optimize available data and prevent duplication of effort. <ol style="list-style-type: none"> i. Identify technical needs and specifications for the Patient Data Hub to be able to receive, query and analyze new EPSDT data fields (MedPlus) ii. Identify and address specific priorities for quality reporting among pediatric providers as part of the District's State HIE Program strategic plan. 	<p>Start Date Sept 1, 2011</p> <p>12-18 months</p> <p>Late Spring, 2011:</p> <p>District's HIT Strategic Plan slated to receive final approval from the Office of the National Coordinator for HIT</p> <p>September, 2011</p> <p>DC HIE Implementation (Year 1) concludes</p> <p>Participant onboarding of DC Medicaid (Patient Data Hub), United Hospital Center, Children's National Medical Center, Providence, and other Provider Practices complete</p>
Piloting: eMeasures	<ul style="list-style-type: none"> • Test extraction, aggregation, analysis and reporting of EHR data to support reporting on eMeasure(s) 	<p>Start Date Jan 1, 2012</p> <p>6 months</p>
Piloting: data set	<ul style="list-style-type: none"> • Test extraction, aggregation, analysis and reporting of EHR data to support reporting on EPSDT data set 	<p>Start Date Jan 1, 2012</p> <p>6 months</p>

Task	Description/additional information	Start date and Estimated time frame; key dates
Estimated start date for EPSDT Oversight and Quality Improvement Plan		Start Date June 1, 2013

APPENDIX G: WELL CHILD QUALITY MEASURES COMPARATIVE MATRIX

The following table details the specific requirements of the District's HealthCheck program, organized according to the following elements of the well child visit:

- General Category Of The "Well Child Visit"
- Comprehensive Physical Exam and Comprehensive Health & Developmental History
- Immunizations
- Specific Screens: Vision, Hearing and Preventive Dental And Risk Assessment
- Lead Screening
- Anticipatory Guidance

Each section identifies specific national measures that can support quality measurement and improvement, the relationship of this measure to CHIPRA, and the relationship of this measure to existing reporting requirements in the District. Under "Data Capture", the table provides information on how data is currently captured relative to the measure (if currently captured), and the implications for data capture relative to emerging HIT/HIE capacity. Shaded measures are part of an initial measure set that may be particularly suited to initial District efforts to support EPSDT oversight and quality improvement.

* Denotes that measure was submitted to National Voluntary Consensus Standards for Child Health Quality Measures (NQF) and recommended for NQF endorsement by Steering Committee.

Well Child Visit						
Medicaid Requirement	Quality Measures			Reporting Requirements		Data Capture
DC HealthCheck	Measure	Measure Steward	CHIP/CHIPRA	DC MCOs	CMS 416	EMR-HIE Reporting Capacity
Well child visits Newborn screening 1 month, 2 months, 4 months, 6 months, 9 months, 12 months 15 months. 18 months 24 months 3 years 4 years 5 years 6 years 8 years 10 years 11 years 12-21 @1/year	Well-child visits in the first 15 months of life	NCQA; also included in HEDIS 2011	Current CHIP CHIPRA core	HEDIS reporting ¹ Monthly and quarterly claims-based EPSDT reporting ²	Screening & participation ratios by age groups	HEDIS measures are reported to DHCF; currently based primarily on MCO collected claims data and validated per NCQA specifications. HEDIS measures do not specify delivery of a “completed screen” or “all EPSDT screens” as required by DHCF MCO reporting requirements. (see footnote). With a conversion to eMeasures, structured data elements can be extracted from the EHR to the DC HIE to document delivery of the well child visit. Depending on eMeasures specifications, EHR data elements that support this measure may include the comprehensive history, physical exam, and anticipatory guidance. These structured data elements could then be transferred to the MCO for aggregation and analysis to applicable eMeasures and then reported from the MCO to DHCF. In the alternative, structured data elements could be transmitted to the Patient Data Hub for aggregation and analysis to the eMeasure, and reported to DHCF from the PDH.
	Well-child visits in the 3rd, 4th, 5th, and 6th years of life	NCQA; also included in HEDIS	Current CHIP CHIPRA core	HEDIS reporting	Screening & participation ratios by age groups	
	Adolescent well-care visits	NCQA; also included in HEDIS 2011	CHIPRA core	HEDIS reporting	Screening & participation ratios by age groups	
	Children/adolescent access to primary care practitioners	NCQA; also included in HEDIS 2011	Current CHIP CHIPRA core	HEDIS reporting	Screening & participation ratios by age groups	

Comprehensive Physical Exam and Comprehensive Health & Developmental History						
Medicaid Requirement	Quality Measures			Reporting Requirements		Data Capture
DC HealthCheck	Measure	Measure Steward	CHIP/ CHIPRA	DC MCO Contracts	CMS 416	
<p>Comprehensive health & developmental history assessment of</p> <ul style="list-style-type: none"> both physical and mental health; Medical exam <p>Blood pressure measurement:</p> <ul style="list-style-type: none"> each visit <p>Developmental/ behavioral assessments required at:</p> <ul style="list-style-type: none"> birth, 2-4 days, by 1 month, 2 months, 4 months, 6 months, 9 months, 12 months, 15 months, 18 months 24 months <p>Services within 30 days of due date for children <2</p>	Blood pressure screening by age 18*	NCQA		Monthly and quarterly claims-based EPSDT reporting		<p>These national measures provide a composite picture of the comprehensive well child exam.</p> <p>To support these measures in e-measure form, as noted above, structured data elements could be extracted from the EHR to the DC HIE, and aggregated and analyzed at either the MCO or Patient Data Hub Level, and reported to DHCF.</p> <p>Structured data to document that visits happened within a required time frame e.g. 30 days from due date may also be extracted from the EHR.</p> <p>Certified EHRs being adopted for use by Medicaid providers are capable of capturing various clinical data elements that are part of a comprehensive physical examination and medical history. Moreover, Meaningful Use reporting requirements relate to and measure the extent to which providers are capable of recording and sharing structured data.¹</p> <p>At issue is whether certified EHRs capture structured data elements pertinent to recording children's developmental history. In the case of the District, eClinical works appears to have this level of data capture. Emerging pediatric EHR standards should also support this function.</p>

Immunizations						
Medicaid Requirement	Quality Measures			Reporting Requirements		Data Capture
DC HealthCheck	Measure	Measure Steward	CHIP/CHIPRA	DC MCO Contracts	CMS 416	
Immunizations –Maintain updated status and records <ul style="list-style-type: none"> • By age 2 • 4 DtaP; • 3 IPV; • 1 MMR; • 3 HiB; • 3 Hep B; • 1 VZV; • 4 PCV; • 2 Hep A • 2 rotavirus • 1 annual influenza 	Childhood immunization status (combination #10) (NQF 0038) HP HealthCheck requires 1 additional element (1 additional HiB vaccination)	NCQA; also included in HEDIS 2011	CHIPRA core set	HEDIS reporting; Monthly and quarterly claims-based EPSDT reporting;		<p>The ability to capture and report childhood immunization data is also a Meaningful Use alternate core measure 1 that eligible professionals, hospitals and critical access hospitals may select.</p> <p>Stage 1 Meaningful use objectives also include in the menu of choices for eligible providers the “capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice.” Accordingly, creation and extraction of immunization data could be one of the initial capacities for District pediatric provider EHR development.</p> <p>To support these measures in eMeasure form, as noted above, structured data elements can be extracted from the EHR to the DC HIE, and aggregated and analyzed at either the MCO or Patient Data Hub level, and then reported to DHCF. Additional data needs, such as slightly varying immunization set requirements between the national measure and the HealthCheck requirement, could also be extracted as a structured data element from the EHR and aggregated at the MCO and/or PDH level</p>
Immunizations –Maintain updated status and records <ul style="list-style-type: none"> • For children between ages 11 and 13, • 1 Tdap • 1 meningococcal vaccine • 3 doses HPV • 1 annual influenza vaccine 	Immunization for Adolescents HealthCheck requires two pieces of additional data (3 doses HPV and 1 annual influenza vaccine)	NCQA; also included in HEDIS 2011	CHIPRA core set	HEDIS reporting; Monthly and quarterly claims-based EPSDT reporting		

Vision, Hearing, and Preventive Dental and Risk Assessment						
Medicaid Re-requirement	Quality Measures			Reporting Requirements		Data Capture
DC HealthCheck	Measure	Measure Steward	CHIP/CHIPRA	DC MCO Contracts	CMS 416	
Vision Screening 5 objective screens required between ages 3 and 10, 3 objective screens required between ages 11 and 21	Pre-school vision screening in the medical home*	AAP		Monthly and quarterly claims-based EPSDT re-reporting		Current reporting mechanisms do not provide full data on the number of completed vision, hearing and dental screens occurring in the District. In addition, measures that address these screening requirements are limited. Consequently, the District may need to further identify structured screening data, using HealthCheck and SMRF as a foundation, in order to fully support oversight and quality improvement activities relative to these screens. Structured data could then be aggregated and analyzed (at MCO or PDH level) for specific reporting and QI activities.
Hearing Screening objective screens required for newborns; at 6 months; 4 screens between ages 5 and 10; 3 screens between ages 11 and 21	Newborn hearing screening*	NCQA		Monthly and quarterly claims-based EPSDT re-reporting		
Dental screen and risk assessment (as part of the pediatric visit)						

Lead Screening						
Medicaid Requirement	Quality Measures			Reporting Requirements		Data Capture
DC HealthCheck	Measure	Measure Steward	CHIP/CHIPRA	DC MCO Contracts	CMS 416	
Lead Screening All Medicaid-eligible children for elevated blood lead levels <ul style="list-style-type: none"> Well-child visits at 9 or 12 and 24 months of age. Children who have not been previously screened should be tested between 36 and 72 months of age. Venipuncture technique to collect all blood specimens for blood lead screening. 	Lead screening in children	NCQA; also included in HEDIS 2011		HEDIS reporting Monthly and quarterly claims-based EPSDT reporting District Lead Trax system	Total Number of Screening Blood Lead Tests	<p>Currently, laboratories upload lab data files directly to the District's LeadTrax system via a secure website; MCOs also report lead screening for EPSDT-enrolled children as a part of their HEDIS reporting to the DHCF.</p> <p>With full HIE capacity, lead screening results may be transmitted to the Patient Data Hub via the DC HIE, for aggregation and analysis at the MCO or PDH level for EPSDT-enrolled children.</p> <p>Additional data needs, such as specific requirements related to the timing of lead screens in HealthCheck, could also be extracted as a structured data element from the EHR and aggregated at the MCO and/or PDH level for oversight and quality improvement.</p>

Anticipatory Guidance

Medicaid Requirement	Quality Measures			Reporting Requirements		Data Capture
DC Health-Check	Measure	Measure Steward	CHIP/CHIPRA	DC MCO Contracts	CMS 416	
Health education and anticipatory guidance Weight measurement and anticipatory guidance to be provided at every well-child visit. “nutrition” as a topic that should be discussed for all ages.	Weight Assessment and Counseling for Children and Adolescents (NQF 0024)	NCQA; also included in HEDIS 2011	CHIPRA core set	HEDIS reporting Monthly and quarterly claims-based EPSDT reporting		<p>Currently, the weight assessment measure is calculated and reported by MCOs as part of HEDIS reporting. Weight Assessment and Counseling is also a Meaningful use Alternate Core Quality Measure.</p> <p>Meaningful use calls for recording and charting BMI for patients ages 2 and over. However, the expectation is that certified EHRs will calculate and record BMI.</p> <p>To support these measures in e-measure form, as noted above, structured data elements will need to be extracted from the EHR to the DC HIE, and aggregated and analyzed at either the MCO or Patient Data Hub Level, and then reported to DHCF.</p> <p>District may need to further identify structured data, using Healthcheck and SMRF as a foundation, in order to fully support oversight and quality improvement activities relative to anticipatory guidance. Structured data could then be aggregated and analyzed (at MCO or PDH level) for specific reporting and QI activities.</p>

1. District contract language with Medicaid managed care organizations states “All HEDIS® performance measures shall be submitted to MAA in accordance with the time frames established by NCQA for submission of these measures to MAA.”

2. Regarding well child visits, this reporting by MCO as part of their contracts with DHCF includes:

Quarterly report on:

- Number and percent of enrollees with completed initial screen within three (3) months of enrollment;

- Number of children less than two (2) years of age who received all EPSDT screens, lab tests, and immunizations within thirty (30) days of scheduled due dates; for children over the age of two (2) years within sixty (60) days; and
- Number and percent of enrollees receiving any dental care.
Monthly Report on:
 - Number and percent of eligible children screened for lead; and
 - Number and percent of eligible children who received vision and hearing screening in accordance with the District’s Vision/ Hearing periodicity schedules.

3 Eligible providers are required to report on three core clinical measures: NQF 0013: Hypertension, Blood Pressure Measurement; NQF 0028: Preventive Care and Screening Measure Pair (Tobacco Use Assessment and Tobacco Cessation Intervention); and NQF 0421: Adult Weight Screening & Follow-up (PQRI 128). If these measures do not apply, the EP may report on “alternate core measures”, including NQF 0024: Weight Assessment and Counseling for Children & Adolescents; NQF 0028: Preventive Care and Screening; Influenza Immunization for Patients 3 50 years (PQRI 110); and NQF 0038: Childhood Immunization Status.

APPENDIX H: GLOSSARY AND ACRONYM LIST

Administrative data: Patient-identifiable data used for administrative, regulatory, healthcare operations, and payment (financial) purposes; claims data is an example of administrative data.

Bright Futures: National health care promotion and disease prevention initiative designed to promote infant, child, and adolescent health within the context of family and community; launched by the U.S. Health Resources and Services Administration in 1990 and currently housed at the American Academy of Pediatrics.

Centers for Medicare and Medicaid Services (CMS): The Federal agency within the U.S. Department of Health and Human Services responsible for oversight of Medicaid programs, formerly known as the Health Care Financing Administration (HCFA).

Children’s Health Insurance Program (CHIP): Passed as part of the Balanced Budget Act of 1997, the Children’s Health Insurance Program provides health insurance for children who come from working families with incomes too high to qualify for Medicaid, but too low to afford private health insurance.

Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA): Legislation that extended and expanded the Children’s Health Insurance Program; allocated \$225 million over 5 years for child health quality initiatives, including the development of quality measures and electronic health records; and included 10 demonstration grants to states to show improvements in child health quality, including new quality measures, health information technology use, provider-based models to improve care delivery, or model electronic health records.

CMS Form-416: Form used by states for required annual reporting to the Centers for Medicare & Medicaid Services on EPSDT performance. The Form-416 was developed to collect information on (1) the number of children provided child health screening services, (2) the number of children referred for corrective treatment, (3) the number of children receiving dental services, and (4) the state’s results in attaining goals set for the state.

Continuous Quality Improvement: Methods to identify opportunities for improving organizational performance, identify causes of poor performance, design and test interventions, and implement demonstrably successful interventions system-wide.

District: Refers to the government of the District of Columbia.

Early and Periodic Screening, Diagnosis, and Treatment (EPSDT): The pediatric component of the Medicaid program created and implemented by Federal statute and regulations. This program establishes standards of care for children and adolescents under age 21, calling for regular screening and for the services needed to prevent, diagnose, correct or ameliorate a physical or mental illness, including alcohol and drug abuse, or a condition identified through screening. Medicaid services for children are required as a matter of law to meet these standards, which may require that services outside traditional Medicaid benefits be provided when needed to treat such conditions.

eHealthDC: Regional Extension Center serving the District of Columbia and overseen by the DC Primary Care Association.

Electronic Health Record: An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.

eMeasure: Quality measure formatted for electronic capture and reporting by providing exact requirements or “specifications” about where information should be collected in an electronic health record.

e-Prescribing (eRx): Computer technology in which physicians use handheld or personal computer devices to review drug and formulary coverage and transmit prescriptions to a printer, EHR-S or pharmacy. e-Prescribing software can be integrated with existing clinical information systems to allow access to patient-specific information to screen for drug interactions and allergies.

Federally Qualified Health Center (FQHC): A type of provider defined by the Medicare and Medicaid statutes for organizations that provide care to underserved populations and include Community Health Centers, Migrant Health Centers, Health Care for the Homeless Programs, Public Housing Primary Care Programs and some tribal clinics. FQHC provide services in both medically underserved area and to medically underserved populations.

Healthcare Effectiveness Data and Information Set (HEDIS): A set of 75 measures developed by the National Committee for Quality Assurance and reported by more than 90 percent of America's health plans.

Health Care Information: Any information, whether oral or recorded in any form or medium, related to the past, present or future physical or mental health or condition of an individual; the provision of healthcare to an individual; or the past, present or future payments for the provision of healthcare to the individual.

Health Information Exchange (HIE): The electronic movement of health-related information among organizations, according to nationally recognized standards.

Health Information Technology (HIT): Certified EHRs and other technology and connectivity required to meaningfully use and exchange electronic health information.

HITECH Act: The Health Information Technology for Economic and Clinical Health (HITECH) Act is a subset of American Recovery and Reinvestment Act of 2009 that is an "act within the act," embedded in the ARRA legislation. There is nearly \$30 billion in funding specifically aimed at helping healthcare providers obtain Meaningful Use of health information technology (HIT), including electronic health records and care coordination through health information exchange (HIE). HITECH seeks to improve patient care and make it patient-centric through the creation of a secure, interoperable nationwide health information network. A key premise is that information should follow the patient, and artificial obstacles — technical, bureaucratic, or business related — should not be a barrier to the seamless exchange of information.

Meaningful Use: Under the HITECH Act, an eligible professional or hospital is considered a "meaningful EHR user" if they use certified EHR technology in a manner consistent with criteria established by the Secretary through the rulemaking process, including but not limited to e-Prescribing through an EHR, and the electronic exchange of information for the purposes of quality improvement, such as care coordination. In addition, eligible professionals and hospitals must submit clinical quality and other measures to HHS. The definition of Meaningful Use is being developed in three stages; the final rule describing Stage 1 Meaningful Use was released on July 13, 2010.

National Committee on Quality Assurance (NCQA): An organization that sets standards for, evaluates, and accredits health plans and other managed health care organizations.

National Quality Forum (NQF): A non-profit organization that works to improve the quality of American health care by building consensus on national priorities and goals for performance improvement, endorsing national consensus standards for measuring and publicly reporting on performance, and promoting attainment of national goals through education and outreach programs.

Patient Data Hub (PDH): Health information exchange linking providers connected to the DC RHIO to the District's Medicaid information systems to allow integrated views of both claims-based and community-based health information for the District's Medicaid population.

Regional Extension Center (REC): HITECH is funding 62 regional centers, each serving a defined, non-overlapping geographic area. The REC provides on-site technical assistance in selecting a certified EHR, implementing it, enhancing clinical and administrative workflow, and complying with privacy and security requirements. Each REC is a U.S.-based nonprofit organization with established support and recognition within the local communities they propose to serve. The REC focuses its effort on individual and small group practices (<10 providers) and providers in public and critical access hospitals, community health centers and other safety net providers.

Regional Health Information Organization (RHIO): A multi-stakeholder organization that enables the exchange and use of health information, in a secure manner, for the purpose of promoting the improvement of health quality, safety and efficiency.

Screening: As defined in 42 U.S.C. § 1396d, a screening includes services that at a minimum include: a comprehensive health and developmental history (including assessment of both physical and mental health development); a comprehensive unclothed physical exam; appropriate immunizations according to age and health history; laboratory tests (including lead blood level assessment appropriate for age and risk factors); and health education (including anticipatory guidance).

Standard Medical Record Form: Standardized paper forms developed collaboratively in the District of Columbia in response to the Salazar v. District of Columbia settlement. The forms were designed to guide and document required components of a comprehensive HealthCheck EPSDT visit.

Structured Data: Discrete data that is populated by a set of pre-defined items, e.g. a pick list.

Well-Child Services: Services listed under “Screening” above, as well as vision testing, hearing testing, and dental assessments and referrals.

Acronyms

AHRQ	Agency for Healthcare Research and Quality
CHIP	Children’s Health Insurance Program
CHIPRA	Children’s Health Insurance Program Reauthorization Act of 2009
CMS	Center for Medicare and Medicaid Services
CNMC	Children’s National Medical Center
DC	District of Columbia
DCPCA	District of Columbia Primary Care Association
DC RHIO	District of Columbia Regional Health Information Organization
DHCF	Department of Healthcare Finance (DC Medicaid agency)
EHR	Electronic Health Record
EPSDT	Early Periodic Screening, Diagnosis, and Treatment
FQHC	Federally Qualified Health Center
HEDIS	Health Effectiveness Data and Information Set
HIE	Health Information Exchange
HIT	Health Information Technology
HITECH	Health Information Technology for Economic and Clinical Health Act of 2009

HRSA	Health Resources and Services Administration
IOM	Institute of Medicine
MCO	Managed Care Organization
NCQA	National Committee for Quality Assurance
NQF	National Quality Forum
PDH	Patient Data Hub
PICHQ	Partnership to Improve Children's Healthcare Quality
REC	Regional Extension Center
SMRF	Standard Medical Record Form

APPENDIX I: METHODOLOGY AND KEY INFORMANTS

The information presented in this report was obtained primarily through:

- Review of resources pertaining to the District of Columbia’s Medicaid program and the *Salazar v. District of Columbia* litigation.
- Collection of resources pertaining to child health care quality improvement or measurement from sources that include: the Agency for Healthcare Research and Quality, the National Committee for Quality Assurance, the National Quality Forum, the Institute of Medicine, and the Centers for Medicare & Medicaid Services.
- Structured telephone interviews with national and District experts on child health quality improvement, measurement and quality reporting, and health information technology. Interviews proceeded from an interview protocol, provided to informants in advance, which contained questions relevant to their area of expertise. A list of key informants appears below.

In addition, a draft of this report was reviewed by advisory committee members and all interviewees to ensure completeness, accuracy, and relevance to District stakeholders.

Key Informant	Title and Affiliation
Sharon Baskerville	CEO, DC Primary Care Association
Valentine Breitbarth	Management Analyst, DC Department of Health Care Finance Office of Preventive and Acute Care
Christina Bristol	EPSDT Manager, Chartered Health Plan
Lekisha Daniel-Robinson	Health Insurance Specialist, Division of Quality, Evaluation & Health Outcomes, Centers for Medicare & Medicaid Services
Arthur Davidson	Director of Public Health Informatics, Denver Public Health
Denise Dougherty	Senior Advisor on Child Health and Quality, Agency for Healthcare Research and Quality (AHRQ)
Marian Earls	Medical Director, Guilford Child Health, Inc.
Scott Finley	Principal Investigator, Westat
James Focht	Chief Information Officer, DC Department of Health Care Finance
Brian Jacobs	Chief Medical Information Officer, Children’s National Medical Center
Marsha Lillie-Blanton	Director of the Division of Quality, Evaluation & Health Outcomes, Centers for Medicare & Medicaid Services
Kathy Millian	Plaintiff’s Counsel
Karen Llanos	Technical Director, Division of Quality, Evaluation & Health Outcomes, Centers for Medicare & Medicaid Services
LaRah Payne	DC Patient Data Hub
Jane Perkins	Plaintiff’s Counsel
Ann Page	Director, Health Care Accountability Administration, DC Department of Health Care Finance

Donna Ramos-Johnson	Chief of Technology Operations, DC Regional Health Information Organization (DC RHIO)
John Richards	Principal Investigator, Bright Futures/Georgetown
Cynthia Ruff	EPSDT Coordinator, Centers for Medicare & Medicaid Services
Sarah Scholle	Vice President of Research and Analysis, National Committee
Vince Schuyler	Program Director, DC Partnership to Improve Children's Healthcare Quality (DC PICHQ)
Colleen Sonosky	Associate Director, DC Department of Health Care Finance Office of Preventive and Acute Care
Mark Weissman	Chief, General Pediatrics & Community Health, Children's National Medical Center
Reva Winkler	Senior Director of Performance Measures, National Quality Forum (NQF)
B. J. Wolf	EPSDT Manager, Health Services for Children with Special Needs (HSCSN)

ENDNOTES

- 1 "Consent Judgment; Order Modifying the Amended Remedial Order of May 6, 1997 and vacating the order of March 27, 1997," ("Settlement Order") January 25, 1999.
- 2 Children's Health Insurance Program Reauthorization Act of 2009, Pub. L. No. 111-3 (Feb. 4, 2009).
- 3 Section 3013 of the American Recovery and Reinvestment Act of 2009 (ARRA), Pub. L. No. 111-5 (Feb. 17, 2009).
- 4 Division B, Part IV, Subtitle B of the American Recovery and Reinvestment Act of 2009 (ARRA), Pub. L. No. 111-5 (Feb. 17, 2009).
- 5 Institute of Medicine. "Crossing the Quality Chasm: A New Health System for the 21st Century." (Washington, D.C.: National Academy Press, 2001). http://www.nap.edu/openbook.php?record_id=10027
- 6 The Department of Health and Human Services. "Children's Health Insurance Program Reauthorization Act Annual Report on the Quality of Care for Children in Medicaid and CHIP." September 2010. <https://www.cms.gov/MedicaidCHIPQualPrac/Downloads/secprep.pdf>
- 7 National Committee for Quality Assurance. "HEDIS & Quality Measurement." 2011. <http://ncqa.org/tabid/59/Default.aspx>
- 8 National Quality Forum. "Measure Evaluation Criteria." January 2011. http://www.qualityforum.org/docs/measure_evaluation_criteria.aspx
- 9 Reva Winkler and Marina Weiss. Personal interview. 10 February 2011.
- 10 Minnesota Department of Health. "Minnesota Statewide Quality Reporting and Measurement System: Appendices to Minnesota Administrative Rules, Chapter 4654." November 2009. <http://www.health.state.mn.us/healthreform/measurement/qualityappendices-adopt122809.pdf>
- 11 Kaiser Commission on Medicaid and the Uninsured. "Community Care of North Carolina: Putting Health Reform Ideas into Practice in Medicaid." May 2009. <http://www.kff.org/medicaid/upload/7899.pdf>
- 12 42 CFR 438.206-438.210
- 13 Centers for Medicare & Medicaid Services. "State Quality Strategy Tool Kit for State Medicaid Agencies." October 2006 https://www.cms.gov/MedicaidCHIPQualPrac/07_Tools_Tips_and_Protocols.asp
- 14 The District's Medicaid quality strategy is articulated most recently in its 2004 plan, "Continuous Quality Improvement for Oversight and Assessment of Medicaid Managed Care Organizations." See Footnote 18.
- 15 These are: Unison Health Plan, DC Chartered Health Plan, and Health Care for Children with Special Needs (HSCSN).
- 16 Pay for performance ("P4P") is a value-based payment model that rewards health care providers for meeting certain performance measures for quality and efficiency.
- 17 There are currently two Learning Collaboratives supported by the DHCF office of Quality: the Collaborative to Improve Perinatal Outcomes and the Collaborative to Improve Chronic Disease Outcomes.
- 18 DC Department of Health Medical Assistance Administration Office of Managed Care. "Continuous Quality Improvement Plan For Oversight and Assessment of Medicaid Managed Care Organizations." March 18, 2004. http://dchealth.dc.gov/doh/lib/doh/services/medicaid/pdf/cqi_plan_01_24_05.pdf
- 19 The website for the DC Partnership to Improve Children's Healthcare Quality can be found at: <http://www.dchealthcheck.net/resources/DC/DCPICHQ.html>.
- 20 The four hospitals currently connected to and exchanging data through the DC RHIO are: Georgetown University Hospital, George Washington University Hospital, Howard University Hospital, and Washington Hospital Center.
- 21 See page 12 of: DC Department of Health Care Finance. "District of Columbia Health Information Exchange Strategic Plan: FY2011 – FY2013." Version 1.1
- 22 "Plaintiff's Motion to Enforce Independent Verification of the EPSDT Data Requirements of Paragraph 46 of the Settlement Order of January 25, 1999." Filed October 14, 2010.
- 23 Mercer. "EPSDT System and Protocol Study: Findings Report" September 11, 2008.
- 24 See appendix C for full list of CHIPRA measure set.
- 25 See Appendix G for an evaluation of the relationship of existing NCQA quality measures to the CMS Form-416 and meaningful use.
- 26 For instance, see: DC Department of Health Care Finance. "2009 Report Card on DC Medicaid & Alliance Managed Care Plans." <http://newsroom.dc.gov/show.aspx/agency/dhcf/section/2/release/20832>
- 27 HEDIS measures are often tied to continuous enrollment requirements that can be problematic in measuring access and quality for people insured under state Medicaid programs. Due to frequent transitions of children and families on and off the program, continuous enrollment requirements may result in numerators and denominators that do not reflect the actual number of services delivered. Some states address this issue by modifying HEDIS measures to reflect these frequent transitions – for instance, disregarding continuous enrollment requirements for Medicaid managed care reporting.

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- 28 Correspondence with Reva Winkler and Marina Weiss.
- 29 “Plaintiff’s Motion to Enforce Independent Verification of the EPSDT Data Requirements of Paragraph 46 of the Settlement Order of January 25, 1999.” Filed October 14, 2010.
- 30 See the CMS Form-416 instruction form, available at: https://www.cms.gov/MedicaidEarlyPeriodicScrn/03_StateAgencyResponsibilities.asp
- 31 “Defendants’ Opposition to Plaintiffs’ Motion to Compel the Audit of the District’s 2009 and 2010 CMS Form 416’s and Cross-Motion to Suspend the Requirements of Paragraph 46 of the Settlement Order.” Filed January 10, 2011.
- 32 42 CFR Part 495, Subpart D
- 33 Ibid.
- 34 Agency for Healthcare Research and Quality. “Track B: Update on CHIPRA Model Children’s EHR Format: Slide Presentation from the AHRQ 2010 Annual Conference.” 28 September 2010.
- 35 Joseph F. Hagan. “Discerning the Bright Futures of Electronic Health Records.” *Pediatric Annals* 37:3 (March 2008). http://cmapspublic2.ihmc.us/rid=1H2ZTYTV3-1WP90I3-HKT/Discerning_the_Bright_Futures_of_Electronic_Health_Records.pdf
- 36 Indian Health Service. “IHS Child Health Notes.” July 2010. http://www.ihs.gov/medicalprograms/mch/m/ChPedNotes.cfm?module=7_10
- 37 DC Department of Health Care Finance. “District of Columbia Health Information Exchange Strategic Plan: FY2011 – FY2013.” Version 1.1
- 38 Ibid